

GALAXY SCIENCE FICTION

August 1966 60¢

THE BODY BUILDERS

by Keith Laumer



HERESIES OF THE HUGE GOD

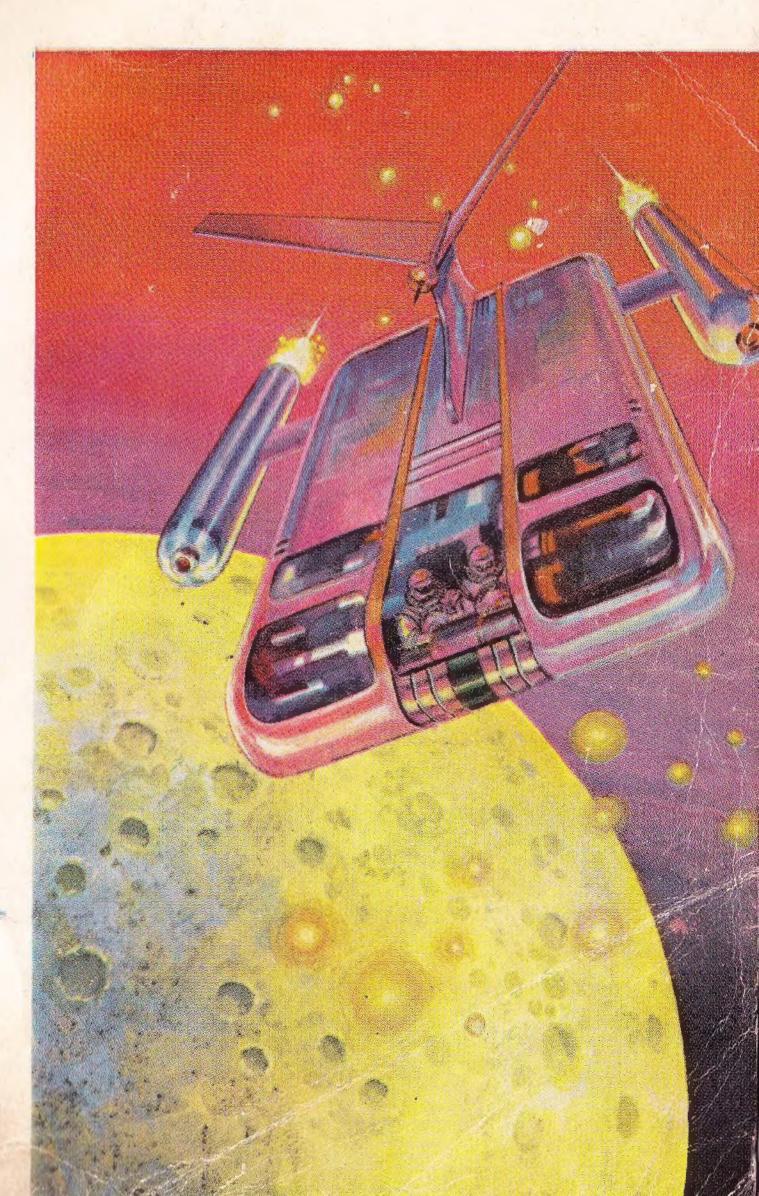
by Brian W. Aldiss



THE PIPER OF DIS

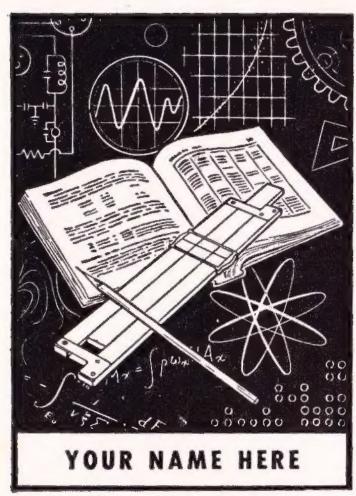
James Blish & Norman L. Knight

WILLY LEY **ALGIS BUDRYS** FRANK HERBERT - and many more!

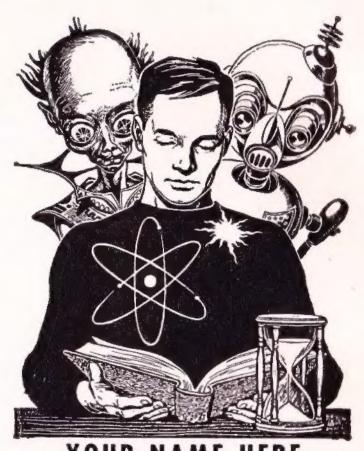


The BEMs in your neighborhood

won't run off with your books if you put inside the front cover of each book...a gummed bookplate with your name printed on it!

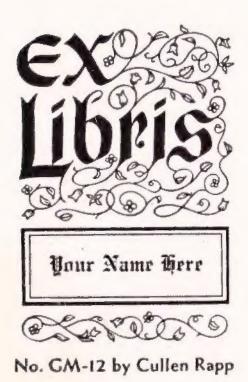


No. GF-614 by Emsh



YOUR NAME HERE

No. GF-612 by Emsh



Your Name Here

No. GX-57 by Lynd Ward

FINAGLE SAYS-

The umpteenth corollary of Finagle's General Law of Dynamic Negatives says:

"No books are ever lost by loaning except ones you particularly want to keep."

100 for \$4; 200, \$6; 300, \$8 with owner's name imprinted All Postpaid. Add state sales tax, if any.

ACTUAL SIZE, all designs, 3x4 inches

The designs shown above are the only ones we offer!

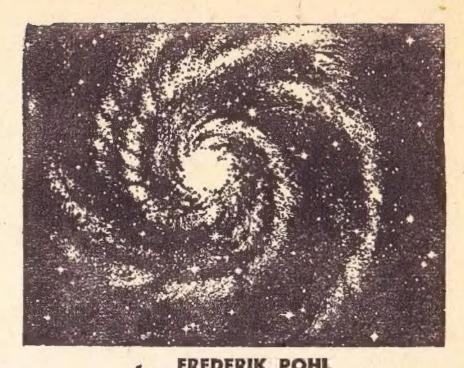
Order from GALAXY

421 Hudson Street, New York 14, N. Y.

Galaxy

ALL STORIES NEW

Galaxy is published in French and Italian. The U. S. Edition is published in Braille. This Edition is also published in Living Tape by Services for the Blind, Inc., Des Moines, Iowa.



SANDAMANDE T. PAREN
Editor
WILLY LEY
Science Editor
JUDY-LYNN BENJAMIN
Associate Editor
ROBERT M. GUINN
Publisher
DAVID PERTON
Production Manager
LAWRENCE LEVINE ASSOC
Advertising
MAVIS FISHER

Subscription Mgr.

GALAXY MAGAZINE is published bi-monthly by Galaxy Publishing Corporation. Main offices: 421 Hudson Street, New York, N.Y. 10014. 60c per copy Subscription: (12 copies) \$6.00 in the United States, Canada, Mexico, South and Central America and U. S. Possessions. Elsewhere \$7.00. Second-class postage paid at New York, N.Y. and at additional mailing offices. Copyright New York 1966 by Galaxy Publishing Corporation, Robert M. Guinn, President. All rights including translations reserved. All material submitted must be accompanied by selfaddressed stamped envelopes. The publisher assumes no responsibility for unsolicited material. All stories printed in this magazine are fiction and any similarity between characters and actual persons is coincidental.

Printed In the U.S.A.

By The Guinn Co., Inc. N. Y.

Title Reg. U. S. Pat. Off.

CONTENT	51, 1900	Vol.	24,	140. 0	
NOVELETT	ES				
THE BODY by Keith			• • • •		-

ALICHET TOUCH ON ALL OU AL

AMONG THE HAIRY EARTHMEN 88
by R. A. Lafferty
THE LOOK 99
by George Henry Smith

SHORT STORIES

Cover by MORROW

The Game

The other day Hal Clement, Willy Ley and the undersigned took part in a closed-circuit television panel discussion before seven thousand teachers in convention assembled in New York City. What the science teachers were interested in was finding ways to be more effective in teaching their classes; what we were interested in was showing that science fiction can help in this. (Apparently it really does. The more scientists we meet, the more we become convinced that early reading of sf is one of the greatest spurs to an interest in a scientific career.)

In the course of the conversation Hal Clement described what he calls The Game — the game, known to all science-fiction writers and most sf readers, of making accurate deductions from an inaccurate statement. That's what science fiction is all about. The author is entitled to One Big Lie. He can say, for example, that faster-than-light travel is possible; or that a time machine has been invented; or that men can read each other's minds. What comes after that may not be a lie, however; it must follow naturally and inevitably from the first premise.

It seems to us that it is not only science-fictionists who play The Game, but scientists as well. What else is the Scientific Method but an application of The Game? Einstein invents a theory - call it relativity - and from that original invention certain consequences may be deduced. But he cannot call in a new theory to explain each of the consequences, any more than a science-fiction writer can pull another rabbit out of his hat to get his hero out of trouble whenever he likes.

Which leads us to the basic resemblance between science and science fiction. Both are defined not by their subject matter but by their method of handling it. Any subject is suitable for treatment by either . . . it's all in the approach! — The Editor



and rituals, alchemy and sorcery, spells and incantations. It is a world whose sinister, ever-growing power is working its diabolical will on millions—even in today's so-called "scientific age" — and may even now be influencing your future.

THE SUPERNATURAL rips the veil of secrecy from men and women who seem "just like you and me" by day—but walk with Satan by night. UNMASKED: the innocent young secretary, so shy she won't even hold your hand. But at midnight she will feverishly join the naked

dance round the Phallic Pillar. UN-MASKED: the Voodoo Priest with hun-dreds of followers right in mid-Manhattan. He Instructs his frenzied cultists in the arcana of the Julu Doll, Murder Spike, and "Blood Bucket."

Only feels are "too grown up" to fear the occult
Nobody intelligent believes in weird supernatural
tales, we are told. Yet why does the Church—
Catholic and Protestant—still regularly performs
exorcisms to drive out demons and evil spirits? Why are mediums no longer being "scientifically exposed" in public — is it because the so-called "ghost breakers" found that some mediums defy scientific exposure? Why are leading universities, like Duke in North Carolina, quietly spending millions of dollars for research into mind-reading fortune telling, telekinesis and other aspects of ESP — is it because they don't believe?

Guaranteed to Thrill You or Pay Nothing If you tried to duplicate the incredibly rich library of satanic lore that comprises THE SUPERNAT-URAL, you would have to visit 26 countries and still not be able to procure all the forbidden texts, all the true full-color photographs in the book. Serious occulists might pay even \$50 for what is in this volume. Yet-because huge demand for book has made possible economies of large scale printing your price is only \$12.50. Send payment with coupon now for prompt free delivery. If not delighted, return book within 10 days for full refund no questions asked. Mail to HAWTHORN BOOKS, 70 Fifth Ave., New York, N.Y. 10011.

Satur's bride Actual levitation in SEE gin sprawled on alliar at Black Mass Lendon before hum-dreds of skeptics

INSTITUTIONS INCLUSE: British Museum, London · Australian Museum, Sydney - Egyptian Museum, Cairo - Musee du Louvre, Paria - Museo de Prado, Madrid - Stantsbibliothek, Bamberg, Germany - Duke University, North Carolina - etc.

20,000 YEARS OF PREHISTORIC, ANCIENT, MEDIEVAL AND MODERN OCCULTISM — INCLUDES OCCULT IN LITERATURE, FILM, CULTURE!

Alchemy Astrology Blasphony Cabbalism Castration Cults and Sects Fetishes Demonology De Sade, Marquis

Dracula Druidism Earth Mother Evil Eve Fertility Cult Frankenstein resid Fromm, Erich

Ghouls. Genital Symbolism Golem Greek Magic Hebrew Magic Heresy Incubus Intercourse

Karma Nostradamus Opium

with Satan Ouija Board Pantacle Lovecraft, H.P. Parapsychology
Love potions Phallic Worship
LSD-25 Poe, Edgar Allem
Necrophilia Rosicrucians Sabbat Science-fiction Sodomy . More

COOPERATING.

Hawthorn Books, 70 Fifth Avenue Dept. Q-866, New York, N.Y. 10011

I enclose check or money order for \$12.50. Send THE SUPERNATURAL under your no-risk money back guarantee. I must experience thrill after thrill from this shockingly frank book or I'll return it within 10 days for full refund. I save all postage and shipping charges.

Print Address City_ (8990)

The Body Builders

by KEITH LAUMER

Illustrated by NODEL

Tired of being a 97-pound weakling?

Just buy yourself the Body Beautiful!

I

He was a big bruiser in a Gendye Mark Seven Sullivan, the luxury model with the nine-point sensory system, the highest-priced Grin-U-Matic facial expression attachment on the market and genuine human hair, mustache and all.

He came through the dining room entry like Genghis Kahn invading a Swiss convent. If there'd been a door in his way he'd have kicked it down. The two lads walking behind him—an old but tough-looking utility model of Liston and a fairly new Wayne—kept their hands in their pockets and flicked their

whips. The head waiter popped out with a stock of big purple menus, but the Sullivan went right past him, headed across toward my table like a field marshal leading a victory parade.

Lorena was with me that night, looking classy in a flossed-up Dietrich that must have set her back a month's salary. She was in her usual mood for the usual reason: she wanted to give up her job at Cent-Prog and sign a five-year marriage contract with me. The idea left me cold as an Eskimo's tombstone. In the first place, at the rate she burned creds, I'd have to creak around in a second-hand Lionel with about thirty per cent sensory coverage and an undersized power core; and in the second, I was still carrying the torch for Julie. Sure, Julie had nutty ideas about Servos. According to her, having a nice wardrobe of specialized outfits for all occasions was one step below cannibalism.

"You and that closet full of zombies!" she used to shake her finger under my nose. "How could a girl possibly marry you and never know what face she'd see when she woke up in the morning!"

She was exaggerating, but that was the way those Organo-Republicans are. No logic in 'em.

After all, doesn't it make sense to keep your organic body on file in the Municipal Vaults, safe out of the weather, and let a comfortable, late-model Servo do your walking and talking? Our grandparents found out it was a lot safer and easier to sit in front of the TV screen with feely and smelly attachments than to be out bumping heads with a crowd. It wasn't long after that that they developed the contact screens to fit your eyeballs, and the plug-in audio, so you began to get the real feel of audience participation. Then, with the big improvements in miniaturization and the new tightchannel transmitters, you could have your own private man-onthe-street pickup. It could roam, seeing the sights, while you racked out on the sofa.

Of course, with folks spending so much time flat on their backs, the Public Health boys had to come up with gear to keep the organic body in shape. For a while, people made it with part-time exercise and home model massage and feeding racks, but it wasn't long before they set up the Central File system.

Heck, the government already had everything about you on file, from your birth certificate to your fingerprints. Why not go the whole hog and file the body too?

Of course, nobody had expected what would happen when the quality of the sensory pickups and playbacks got as good as they did. I mean the bit the eggheads call "personality gestalt transfer". But it figured. A guy always had the feeling that his consciousness was sitting somewhere back of his eyes; so when the lids were linked by direct hookup to the Servo, and all the other senses tied in - all of a sudden, you were there. The brain was back in Files, doped to the hairline, but you - the thing you call a mind - was there, inside the Servo, living it up.

And with that kind of identification, the old type utilitarian models went out of style, fast. People wanted Servos that expressed the real inner man - the guy you should have been. With everybody as big and tough as they wanted to be, depending on the down payment they could handle, nobody wanted to take any guff off anybody. In the old days, a fellow had to settle for a little fender-bending; now you could hang one on the other guy, direct. Law Cent had to set up a code to cover the problem, and now when some bird insulted you or crowded you off the Fastwalk, you slugged it out with a Monitor watching.

Julie claimed it was all a

bunch of nonsense; that two Servos pounding each other didn't prove anything. She could never see that with perfect linkage, you were the Servo. Like now: The waiter had just put a plate of Consomme au Beurre Blanc in front of me, and with my high-priced Yum-gum palate accessory, I'd get the same high class taste thrills as if the soup was being shoved down my Org's mouth in person. It was a special mixture, naturally, that lubricated my main swivel and supplied some chemicals to my glandular analogs. But the flavor was there.

And meanwhile, the old body was doing swell on a nutrientdrip into the femoral artery. So it's a little artificial maybe - but what about the Orggies, riding around in custom-built cars that are nothing but substitute personalities, wearing padded shoulders, contact lenses, hearing aides, false teeth, cosmetics, elevator shoes, rugs to cover their bald domes. If you're going to wear false eyelashes, why not false eyes? Instead of a nose bob, why not bob the whole face? At least a fellow wearing a Servo is honest about it, which is more than you can say for an Orggie doll in a foam-rubber bra - not that Julie needed any help in that department.

I dipped my big silver spoon

A SPLIT SECOND IN ETERNITY

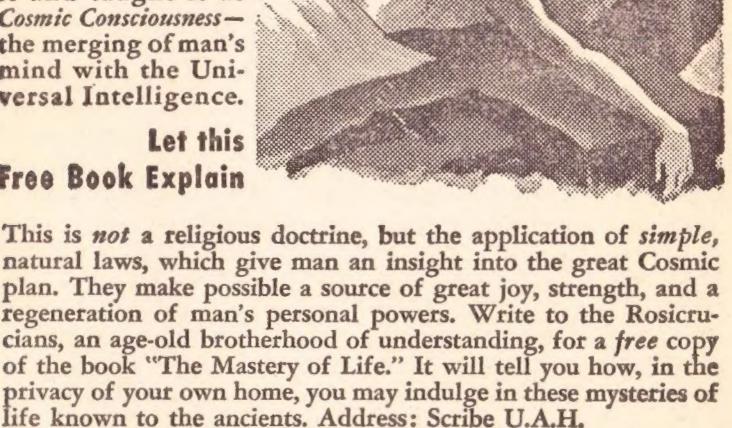
The Ancients Called It COSMIC CONSCIOUSNESS

Must man die to release his inner consciousness? Can we experience momentary flights of the soulthat is, become one with the universe and receive an influx of great understanding?

The shackles of the body-its earthly limitations—can be thrown off and man's mind can be attuned to the Infinite Wisdom for a flash of a second. During this brief interval intuitive knowledge, great inspiration, and a new vision of

our life's mission are had. Some call this great experience a psychic phenomenon. But the ancients knew it and taught it as Cosmic Consciousness the merging of man's mind with the Universal Intelligence.





The ROSICRUCIANS SAN JOSE, CALIFORNIA 95114 U.S.A.

Please Include Your Zip Code

in and had the first sip just under my nose when the Sullivan slammed my arm with his hip going past. I got the soup square in the right eye. While I was still clicking the eyelid, trying to clear the lens, the Liston jarred my shoulder hard enough to rattle my master solenoid.

Normally, I'm a pretty eventempered guy; it's my theory that the way to keep a neurotronic system in shape is to hold the glandular inputs to a minimum. But, what with the big event coming up that night, and Lorena riding me hard on the joys of contract life, I'd had a hard day. I hopped up, overrode the eye-blink reflex, made a long reach and hooked a finger in the Liston's collar going away.

"Hold it right there, stumblebum!" I gave the collar a flick to spin him around.

He didn't spin. Instead, my elbow joint made a noise like a roller skate hitting loose gravel; the jerk almost flipped me right on my face.

The Liston did a slow turn, like a ten-ton crane rig, looked me over with a pair of yellow eyes that were as friendly as gun barrels. A low rumbling sound came out of him. I was a little shook but mad enough not to let it bother me.

"Let's have that license num-

ber," I barked at him. "There'll be a bill for the eye and another one for a chassis checkup!"

The Wayne had turned too, and was beetling his brows at me. The big shot Sullivan pushed between the two of them, looked me over like I was something he'd found curled up in a doorway.

"Maybe you better kind of do a fade, Jasper," he boomed loud enough for everybody in the restaurant to hear. "My boys got no sense of humor."

I had my mouth open for my next mistake when Lorena beat me to it:

"Tell the big boob to get lost, Barney; he's interrupting what I was saying to you."

The Sullivan rolled an eye at her, showing off his independent suspension. "Shut your yap, sister," he said.

That did it. I slid my left foot forward, led with a straight left to the power pack, then uppercut him with everything I was able to muster.

My right arm went dead to the shoulder. The Sullivan was still standing there, looking at me. I was staring down at my own fist, dangling at my side. Then it dawned on me what was wrong.

For the moment, I'd forgotten I was wearing a light sport-model body.



H

Gully Fishbein, my business manager, Servo-therapist, drinking buddy, arena trainer and substitute old-maid aunt had warned me I might pull a stunt like this some day. He was a Single-Servo Socialist himself, and in addition to his political convictions, he'd put a lot of time and effort into building me up as the fastest man with a net and mace in show business. He had an investment to protect.

"I'm warning you, Barney," he used to shove an untrimmed hangnail under my nose and yell. "One day you're gonna get your reflexes crossed and miss your

step on the Fastwalk — or gauge a close one like you was wearing your Astaire and bust the neck of that Carnera you wasted all that jack on. And then where'll you be, hah?"

"So I lose a hulk," I'd come back. "So what? I've got a closet full of spares."

"Yeah? And what if it's a total? You ever heard what can happen to your mind when the connection's busted — and I do mean busted — like that?"

"I wake up back in my Org body; so what?"

"Maybe," Gully would shake his head and look like a guy with dangerous secrets. "And maybe not . . ." While I was thinking all this, the Sullivan was getting his money's worth out of the Grin-U-Matic. He nodded and rocked back on his heels, taking his time with me. The talk had died out at the tables around us. Everybody was catching an ear full.

"A wisey," the Sullivan says, loud. "What's the matter, Cheapie, tired of life outside a

repair depot?"

"What do you mean, 'Cheapie'?" I said, just to give my
Adam's apple a workout. "This
Arcaro cost me plenty . . . and
this goon of yours has jarred my
contacts out of line. Just spring
for a checkup and I'll agree to
forget the whole thing."

"Yeah." He was still showing me the expensive grin. "I'll bet you will, pint-size." He cocked an eye at the Wayne. "Now, let's see, Nixie, under the traffic code, I got a couple courses of action, right?"

"Cream duh pansy and let's shake a ankle, Boss. I'm hungry." Nixie folded a fist like a forty pound stake mallet and moved in to demonstrate his idea.

"Nah." The Sullivan stopped him with the back of his hand against his starched shirt-front. "The guy pops me first, right? He wants action. So I give him action. Booney." He snapped his fingers and the Liston thumbed a shirt stud.

"For the record," the Sullivan said in a businesslike voice. "Notice of Demand for Satisfaction, with provocation, under Section 991-b, Granyauck 6-78." I heard the whir and click as the recorder built into the Liston's thorax took it down and transmitted it to Law Central.

All of a sudden my mouth was dry.

Sometimes those Servo designers got a little too realistic. I tapped a switch in my lower right premolar to cut out the panicreaction circuit. I'd been all set for a clip on the jaw, an event that wouldn't be too good for the Arcaro, but nothing a little claim to LawCent wouldn't fix up. But now it was dawning like sunrise over Mandalay that Big Boy had eased me into a spot or that I'd jumped into it, mouth first. I'd hit him. And the fact that he'd put my consomme in my eye first wouldn't count not to LawCent. He had the right to call me out - a full-scale Servo-to-Servo match - and the choice of weapons, ground, time, everything was his.

floor number three," the Sullivan rapped out to the Wayne. "My favorite ground." He winked at Lorena. "Nine kills there, baby. My lucky spot."

"Whatever you say," I felt

myself talking too fast. "I'll be back here in an hour, raring to go."

"Nix, Cheapie. The time is now. Come as you are; I ain't formal."

"Why, you can't do that," Lorena announced. Her voice tapes were off key, I noticed; she had a kind of shrill, whiney tone. "Barney's only wearing that little old Arcaro!"

"See me after, doll," the Sullivan cut her off. "I like your style." He jerked his head at the Wayne. "I'll take this clown bare-knuck, Mixie, Naples rules." He turned away, flexing the oversized arms that were an optional extra with the late-model Gendyes. Lorena popped to her feet, gave me the dirtiest look the Dietrich could handle.

"You and that crummy Arcaro." She stuck it in me like a knife. "I wanted you to get a Flynn, with the —"

"Spare me the technical specs, kid," I growled. I was getting the full picture of what I'd been suckered into. The caper with the soup hadn't been any accident. The timing was perfect; I had an idea the Liston was wired a lot better than he looked. Somebody with heavy credits riding on that night's bout was behind it; somebody with enough at stake to buy all the muscle-Servos he needed to pound me

into a set of loose nerve ends waving around like worms in a bait can. Busting the Arcaro into a pile of scrap metal and plastic wouldn't hurt my Org physically - but the trauma to my personality, riding the Servo, would be for real. It took steel nerve, cast-iron confidence, razor-edge reflexes and a solid killer's instinct to survive in the arena. After all, anybody could lay out for a Gargantua Servo, if that was all it took; the timing, and pace, and ringcraft that made me a winner couldn't survive having a body pounded to rubble around me. I'd be lucky if I ever recovered enough to hold a coffee cup one-handed.

The Floor Manager arrived, looking indignant; nobody had called him to okay the fracas. He looked at me, started to wave me off, then did a double take.

"This is the agressor party?"
The eyebrows on his Menjou crawled up into his hairline.

"That's right," I give it to him fast and snappy. "The bum insulted my lady-friend. Besides which, I don't like his soupstrainer. After I break his rib cage down to chopsticks, I'm going to cut half of it off and give it to the pup to play with." After all, if I was going to get pulverized, I might as well do it in style.

The Sullivan growled.

"You can talk better than that." I pushed up close to him; my nose was on a level with the diamond stickpin in his paisley foulard. "What's your name, Big Stuff? Let's have that registration."

"None of your pidgin, Wisey." He had a finger all ready to poke at me, saw the Monitor coming up ready to quote rules, used it to scratch his ear instead. The big square fingernail shredded plastic off the lobe; he was a little more nervous than he acted. That cinched it: he knew who I was — Barney Ramm, light-heavy champ in the armed singles.

Assembly and serial numbers, please," the Monitor said. He sounded a little impatient. I could see why he might. It was customary for a challenger to give with the plate data without being asked — especially a floor-vet like Sullivan. He was giving the official a dirty look.

"Where's Slickey?" he growled.

"He doesn't come on for another fifteen minutes," the Monitor snapped. "Look here —"

"You look here, Short-timer," the Sullivan grunted. The Wayne moved up to help him give the fellow the cold eye. He glared back at them — for about two seconds. Then he wilted. The

message had gotten through. The fix was in.

"Where's the men's room?" I piped up, trying to sound as frisky as ever, but at the moment my mind felt as easy to read as a ninety-foot glare-sign.

"Eh?" The Monitor cut his eyes at me, back at the Sullivan, back to me, like a badminton fan at a championship match. "No," he said. He pushed out his lips and shook his head. "I'm ruling —"

"Rule my foot." I jostled him going past. "I know my rights." I kept going, marched across the dance floor to the discreet door back of the phony palm tree. Inside, I went into high gear. There was a row of coin-operated buffing and circuit-checking machines down one wall, a power core dispenser, a plug-in recharge unit, a nice rack of touch-up paints, a big bin of burned-out reflex coils, and a dispenser full of replacement gaskets with a sign reading FOR SAFETY'S SAKE -PREVENTS HOT BEAR-INGS.

I skidded past them, dived through an archway into the service area. There were half a dozen padded racks here, loops of power leads, festoons of lube conduit leading down from ceiling-mounted manifolds. A parts index covered the far wall. There was no back door.

"Kindly take (click) position numbered one," a canned voice cackled at me. "Use the console provided to indicate required services. Say, fellow, may I recommend this week's special, Slideeze, the underarm lubricant with a diff — "

I slapped the control plate to shut the pitch off. Coming in here suddenly didn't seem as cute as it had ten seconds earlier. I was cornered — and an accident on a lube-rack would save any possible slip-up on the floor. A little voice about as subtle as a jack-hammer was yelling in my ear that I had half a minute, if I was lucky, before a pair of heavies came through the door to check me out . . .

It was three quick steps to the little stub wall that protected the customers from the public eye. I flattened myself against the wall beside it just as big feet clumped outside. The banged open. The Wayne wasn't bothering about being subtle. I wasn't either. I hooked his left instep, spun in behind him. palmed his back hard. He hit face-first with a slam like two garbage flats colliding, and started looping the loop on the tiled floor. Those Waynes always did have a glass jaw. I didn't stick around to see if anybody heard him pile in; I jumped him, slid out through the door. The Liston was standing on the other side of the palm, not ten feet away. I faded to the right, saw another door. The glare sign above it said LADIES. I thought it over for about as long as it takes a clock to say 'tick' and dived through.

III

E ven under the circumstances it was kind of a shock to find myself standing there staring at pink and turquoise service racks, gold-plated perfume dispensers, and a big display rack full of strictly feminine spares that were enough to make a horse blush.

Then I saw her. She was a neat-looking Pickford — the traditional models were big just then. She had fluffy blonde hair, and her chassis covers were off to the waist. I gaped at her, sitting there in front of the mirror, then gulped like a seal swallowing a five-pound salmon. She jumped and swiveled my way, and I got a load of big blue eyes and a rosebud mouth that was opening up to scream.

"Don't yell, lady!" I averted my eyes — an effort like uprooting saplings. "The mob's after me. Just tell me how to get out of here!"

I heard feet outside. So did she, I guess.

"You — you can go out through the delivery door," a nice little voice said. I flicked an eye her way. She was holding a lacy little something over her chest. It slipped when she pointed and I got an eyeful of some of the nicest moulded foamplastic you'd care to see.

"Thanks, baby; you're a doll," I choked out and went past her, not without a few regrets. The door she'd showed me was around a corner at the back. There was a big carton full of refills for the cosmetics vendor beside it, with the top open. On impulse, I reached in and grabbed one going past.

The door opened into an alley

about four feet wide, with a single-rail robo-track down the center for service and delivery mechs. The wall opposite was plain duralith; it went up, a sheer rise without a foothold for a gnat. In both directions the alley was a straight shot for fifty feet to a rectangle of hard late-afternoon sunlight. I could take my choice.

Something clattered to the right. I saw a small custodial cart move jerkily out of a doorway, swing my way, picking up speed. I started to back away; the thing was heavy enough to flatten my Arcaro without slowing down. Then a red light blinked on the front of the thing. It



made screechy noises and skidded to a stop.

"Kindly clear the rail," a fruity voice hooted. "This is your busy Sani-mat Service Unit, bringing that Sani-mat sparkle to another satisfied customer!"

A kind of idea formed up somewhere under my hairpiece. I eased around to the side of the machine, a tight squeeze. It was a squatty, boxy job, with a bunch of cleaning attachments racked in front and a good-sized bin behind, half full of what it had been collecting. I got the lip up, climbed up as it started forward again, and settled down in the cargo. It was lumpy and wet, and you could have hammered the aroma out into horseshoes. I guess the world has made a lot of progress in the last few decades, but garbage still smells like garbage.

I estimated I'd covered a hundred feet or less, when the cart braked to a sudden stop. I heard voices; something clicked and a hum started up near my left ear.

"Kindly clear the rail," the tape said. "This is your Sanimat Service Uuwwrrr — "

The cart jumped and I got another faceful of garbage. Somebody — it sounded like the Wayne — yelled something. I got set, ready to come out swing-

But the voices faded out, and I heard running feet. The cart started up, bumped along clucking to itself like a chicken looking for a place to drop an egg. I rode it along to its next client's back door, then hopped out, legged it to a public screen booth and dialled Gully's number.

IV

ping in past a mixed-up view of city skyline tilting by in the background. His eyes bugged out like a Chihuahua when I told him — a de luxe feature of the four-year-old Cantor he always wore.

"Barney, you nuts?" He had a yelp like a Chihuahua too. "The biggest bout of your career coming up tonight, and you're mixing in a free brawl!" He stopped to gulp and ran his eyes over me. "Hey, Barney! You're wearing an Arcaro. You didn't—"

"The fracas wasn't my idea,"
I got in quick while he was
fighting the Cantor's tonsils back
in line. "Not exactly, anyway.
I took off out the back way,
and —"

"You did what?" The yelp was up into the supersonic now.

"I beat it. Ducked out. Scrammed. What do you think I was going to do, stay there and let that elbow squad pull the legs off me like a fly?"

"You can't run out on a registered satisfaction, Barney!" Gully leaned into his sender until all I could see were two eyes like bloodshot clams and a pair of quivering nostrils. "You, of all people! If the Pictonews services get hold of this, they'll murder you!"

"This hit squad will murder me quicker — and not just on paper!"

"Paper's what I'm talking about! You're the aggressor party; you poked the schlock! You cop a swiftie on this, and you're a fugitive from LawCent! They'll lift your Servo license, and it'll be good-by career! And the fines —"

"Okay — but I got a few rights too! If I can get to another Servo before they grab me, it'll become my legal Corpus operandi as soon as I'm in it. Remember, that Satisfaction is to me, Barney Rum, not to this body I'm wearing. You've got to get me out of here, and back to my apartment - " I felt my mouth freeze in the open position. Fifty feet away across the Fastwalk the Liston and a new heavy, a big, patched-up Baer, had come out of a doorway and were standing there, looking over the crowd. Those boys were as hard to shake loose as gum on

a shoe sole. I ducked down in the booth.

"Listen, Gully," I hissed.
"They're too close; I've got to
do a fast fade. Try to fix it
with LawCent to keep their mitts
off me until I can change. Remember, if they catch me, you
can kiss your ten per cent goodby."

"Barney, where you going? Whattaya mean, ten per cent? It ain't the cookies I'm thinking about!"

"Think about the cookies, Gully." I cut contact and risked a peek. The two goons were still there, and looking my way. If I stepped out, they'd have me. And if I stayed where I was, sooner or later they'd get around to checking the booth

I was still holding something in my hand. I looked at it: the cosmetics kit I'd grabbed on the way out of the ladies' room at the Troc.

The lid flipped back when I touched the little gold button at the side. There were nine shades of eye shadow, mouth paint, plastic lens shades in gold, green and pink — some dames have got screwy ideas about what looks attractive — spare eyebrows and lashes, a little emergency face putty, some thimble-sized hair sprays.

I hated to ruin a hundred cee

wig, but I gave it a full shot of something called Silver Ghost. The pink eyes seemed to go with the hair. The spray was all gone, so it was too late to bleach out a set of eyebrows, so I used a pair of high-arched black ones, then used a gingery set for a mustache. I thought about using one of the fake spit-curls for a goatee, but decided against it. The Arcaro had a nice-sized nose on it, so I widened the nostrils a little and added warts. I risked another peek. The boys were right where I left them.

My jacket was a nice chartreuse job with cerise strips and a solid orange lining. I turned it inside out, ditched the yellow tie, and opened my shirt collar so the violet part showed. That was about all I could do; I opened the door and stepped out.

I'd gone about three steps when the Carnera looked my way. His mouth dropped open like a power shovel getting ready to take a bit out of a hillside. He jammed an elbow into the Liston and he turned around and his mouth fell open. I got a glimpse of some nice white choppers and a tongue like a pink sock. I didn't wait to catch the rest of the reaction: I sprinted for the nearest shelter, a pair of swinging doors, just opening to let a fat Orggie out.

I dived past him into a cool, dark room lit by a couple of glowing beer ads above a long mirror with a row of bottles. I charged past all that, slammed through a door at the back, and was out in an alley, looking at the Wayne. He went into a halfcrouch and spread his arms. That was the kind of mistake an amateur toughie would make. I put my head down and hit him square under his vest button. It wasn't the best treatment in the world for the Arcaro, but it was worse for the Wayne. He froze up and made a noise like frying fat, with his eyeballs spinning like Las Vegas cherries. Between the fall in the john and the butt in the neuro center, he was through for the day.

I got my legs under me and started off at a sort of cripple's lope toward the end of the alley.

My balance and coordination units were clicking like castanets. I richocheted off a couple of walls, made it out into the Slowwalk, and jigged along in a crabbed semicircle, making jerky motions with my good arm at a cab that picked then to drop a fare a few yards away. The hackie reached out, grabbed my shoulder and hauled me inside. Those boys may be built into their seats and end at the

waist, but they've got an arm on them, I'll give 'em that.

"You look like you got a problem there, Mac," He looked me over in the mirror. "What happened, you fall off a roof?"

"Something like that. Just take me to the Banshire Building, fast."

"Whatever you say, Bud. But if I was you, I'd get that servo to a shop as quick as I could."

"Later. Step on it."

"I'm doing a max and a half now!"

"Okay, Okay, just don't waste any time." He muttered to himself then, while I got the bent cover off my reset panel and did what I could to rebalance my



circuitry. My double vision cleared a little, and the leg coordination improved enough so I managed to climb out unassisted when he slammed the heli in hard on the roof deck.

"Be five cees," the cabbie grunted. I paid him. "Stick around a few minutes," I said. "I'll be right back."

"Do me a favor, Clyde; throw your trade to the competition." He flipped the flag up and lifted off in a cyclone of over-revved rotors. I spat out a mouthful of grit and went in through the fancy door with the big gold B.

Gus, the doorman came out of his cage with his admiral's hat on crooked; he hooked a thumb over his shoulder and got his jaw all set for the snappy line. I beat him to it.

"It's me, Barney Ramm. I'm incommunicado to avoid the fans."

"Geeze, Mr. Ramm? Wow, that Arcaro won't never be the same again. Looks like your fans must of caught you after all." He showed me a bunch of teeth that would have looked at home in a mule's face. I lifted a lip at him and went on in.

V

My apartment wasn't the plushest one in the Banshire, but it was fully equipped.

The Servo stall was the equal of anything at Municipal Files. I got enough cooperation out of my legs to hobble to it, got the Arcaro into the rack with the neck plate open and the contacts tight against the transfer disk.

A pull on the locking lever, and I was clamped in tight, ready for the shift. I picked the Crockett; it was rugged enough to handle the Sullivan, and didn't have any fancy equipment installed to have to look out for. It was a little tough coding the number into the panel, but I made it, then slammed the transfer switch.

I've never gotten used to that wild couple of seconds while the highspeed scanner is stripping the stored data off one control matrix and printing it on another one linking it in to the Org brain back between my real ears in the cold files down town. It was like diving into an ocean of ice-cold darkness, spinning like a Roman candle. All kinds of data bits flash through the conscious level: I was the Arcaro, sitting rigid in the chair, and I was also the Crockett, clamped to a rack in the closet, and at the same time I could feel the skull contacts and servicing tubes and the cold slab under me in the Vault. Then it cleared and I was hitting the release lever and stepping out of the closet and beginning to



feel like a million bucks.

The Arcaro looked pretty bad, sagging in the stall, with the phoney eyebrows out of line and the putty nose squashed, and the right shoulder humped up like Quasimodo. It was a wonder it had gotten me back at all. I made myself a promise to give it the best overhaul job money could buy — that was the least I could do. Then I headed for the front door.

The Sullivan would get a little surprise when I found him now. I gave my coon-skin cap a pat as I went by the hall mirror, palmed the flush panel open and ran smack into four large cops, standing there waiting for me.

jails go, but I still didn't like it. They shoved me into a nice corner cell with a carpet, a tiled lube cubicle in the corner, and a window with a swell view of Granyauck — about 1800 feet straight down. There were no bars, but the wall was smooth enough to discourage any human flies from trying it.

The turnkey looked me over and shook his head. He was wearing the regulation Police Special, a dumb-looking production job halfway between a Kildare and a Tracy — Spence, that is. I guess cops have to have a uniferral, but the sight of a couple dozen identical twins standing around kind of gives a fellow a funny feeling — like Servos were just some kind of robot, or something.

"So you're Barney Ramm, huh?" the cop shifted his toothpick to the other corner of his mouth. "You shunt of tried to handle four cops at once, Buddy. Your collision insurance don't cover that kind of damage."

"I want my manager!" I yelled as loud as I could, which
wasn't very loud on account of
a kick in the voice box I got
following up too close on a cop
I had tossed on his ear. "You
can't do this to me! I'll get the
lot of you for false arrest!"

"Relax, Ramm." The jailer

waved his power-billie at me to remind me he had it. I shied off; a shot from the hot end of that would lock my neuro center in a hard knot. "You ain't going no place for a while," the cop stated. "Commissioner Malone wouldn't like it."

"Malone? The Arena Commissioner? What's he got — " I stopped in the middle of the yell, feeling my silly look freeze in place.

"Yeah," the cop said. "Also the Police Commissioner. Seems like Malone don't like you, Ramm."

"Hey!" a dirty idea was growing. "The satisfaction against me: who filed it?"

The cop went through the motions of yawning. "Lessee . . . oh, yeah. A Mr. Malone."

"The dirty crook! That's illegal! I was framed!"

"You slugged him first, right?"
The cop cut me off.

"Sure, but - "

"Ain't a Police Commissioner got as much right as anybody else to defend hisself? Any reason he's got to take guff off some wisenheimer, any more than the next guy? You race him at the light, he'll lock bumpers with you every time!"

"I've got to get out of here,"
I shouted him down. "Get Gully
Fishbein! He'll post the bond!
I've got a bout at the Garden

in less than four hours! Tell the judge! I guess I've got a couple rights!"

"You ain't going to make no bout in no four hours." The cop grinned like Sears foreclosing on Roebuck. "You'll be lucky if you get out before Christmas Holidays start, in September."

"If I don't," I said, "you can start scanning the help-wanted-cripple column. That's what you'll be when me and my twenty-thousand Cee Charlemagne finish with you, you dumb flat-foot!"

He narrowed his eyes down to pinpoints — an extra-cost feature that the taxpayers had to spring for. "Threats, hah?" His voice had the old gravel in it now. "You run out on a Satisfaction, Buster. That's trouble enough for most guys."

"I'll show you trouble," I started, but he wasn't through yet.

fighter, you got kind of a delicate stomach, I guess. We also got you for resisting arrest, damaging public property, committing mayhem on the person of a couple honest citizens, Peeping Tom and shop lifting from the ladies' john. You're set for tonight, pal—and a lotta other nights." He gave me a mock salute and backed out; the glass door clinked in my face while

I was still trying to get my arm back for a swing.

The watch set in my left wrist was smashed flat, along with the knuckles. Those Granyauck cops have got hard heads. I went over to the window and checked the sun.

It looked like about half past four. At eight P.M. the main event would go on. If I wasn't there, the challenger would take the title by default. He was an out-of-town phoney known as Mysterious Marvin, the Hooded Holocaust; he always fought with a flour sack over his from After tonight, he'd be light-heavy champ, bagged how and all and I'd be a busted has-been, with my accounts frozen, my contract torn up, my Servo ticket lifted, and about as much future as a fifth of Bourbon at a Baptist Retreat. It was the finish. They had me. Unless . . .

I poked my head out and looked down the wall. It was a sheer drop to a concrete loading apron that looked about the size of a blowout patch from where I stood. I felt my autonomics kick in; my heart started thumping like an out-of-round drive shaft, and my throat closed up like a crap-shooter's fist. I never had liked heights much. But with my Servo locked in a cell — and me locked in the Servo —

I took a couple turns up and down the cell. It was an idea the boys talked about sometimes, waiting in the service racks before a bout: what would happen if the plastic-foam and wiresponge information correlation unit where the whole brain pattern was recorded got smashed flat — wiped out — while you were in it?

It would be like dreaming you fell — and hit. Would you ever wake up? The Org body was safe, back in the Vaults, but the shock — what would it do to you?

There were a lot of theories. Some of the guys said it would be curtains. The end. Some of them said your Org would go catatonic. I didn't know, myself. If the wheels knew, they weren't spreading it around.

And there was just the one way to find out for sure.

If I stayed where I was, incommunicado, I was finished anyway. Better to go out in style. Before I could change my mind, I whirled, went to the window and swung my legs over the sill. Behind me, I heard somebody yell, "Hey!" I tried to swallow, couldn't, squeezed my eyes shut, and jumped. For a few seconds, it was like a tornado blowing straight up into my face; then it was like being spread-eagled on a big, soft, rubbery mattress. And then—

I was drowning in a sea of rancid fat. I took a deep breath to yell, and the grease in my lungs clogged solid.

I tried to cough, and couldn't do that either. Little red sky-rockets started shooting around back of my eyes like a fire in a fireworks factory. Then the lights ran together and I was staring at a long red glare strip set in a dark ceiling a few inches above my face. I could feel tubes and wires dragging at my arms and legs, my neck, my eyelids, my tongue . . .

I was moving, sliding out into brighter light. A scared-looking face was gaping down at me. I made gargly noises and flapped my hands — about all I could manage under the load of spaghetti. The guy leaning over me jumped like a morgue attendant seeing one of his customers sit up and ask for a light, which wasn't too far off, maybe. My bet had paid off. I was awake, back in my organic body in slot number 99971-Ga8b in the Municipal Body Files.

The next half hour was a little hectic. First they started some kind of a pump, and then I could breathe — a little. While I coughed, twitched, groaned, itched, throbbed and ached in more places than I knew I had,

the file techs fussed over me like midwives delivering a TV baby. They pulled things out, stuck things in, sprayed me, jabbed me, tapped and tested, conferred, complained, ran back and forth, shone lights in my eyes, hit me with little hammers, things down my throat, held buzzers to my ears, asked questions and bitched at each other in high, whining voices like bluebottle flies around a honey wagon. I got the general idea. They were unhappy that I had upset the routine by coming out of a stage three storage state unannounced.

"There are laws against this sort of thing!" a dancey little bird in an unhealthy-looking Org body kept yelling at me. "You might have died! It was sheer good fortune that I happened to have slipped back in the stacks to commune with myself, and heard you choking! You frightened me out of my wits!"

Somebody else shoved a clipboard in front of me. "Sign this," he said. "It's a release covering CentFiles against any malpractice or damage claims."

"And there'll be an extra service charge on your file for emergency reprocessing," the dancey one said. "You'll have to sign that, and also an authorization to transfer you to dead storage until your next of kin or

authorized agent brings in the Servo data — "

I managed to sit up. "Skip the reprocessing," I said. "And the dead storage. Just get me on my feet and show me the door."

"Hows that? You're going to need at least a week's rest, a month's retraining, and a complete reorientation course before you can be released in Org—"

"Get me some clothes," I said.
"Then I'll sign the papers."

"This is blackmail!" Dancey did a couple of steps. "I won't be held responsible!"

"Not if you cooperate. Call me a cab." I tried walking. I was shakey, but all things considered I didn't feel too bad for a guy who just committed suicide. Files had kept me in good condition.

There was a little more argument, but I won. Dancey followed me out, wagging his head and complaining, but I signed his papers and he disappeared — probably to finish communing with himself.

Gully again. His line was busy. I tried Lorena. A canned voice told me her line was disconnected. Swell. All my old associates were kind of fading out of sight, now that I was having troubles with the law.

But maybe Gully was just

busy getting me a postponement. In fact, he was probably over at the Garden now, straightening things out. I gave the hackie directions and he dropped me by the big stone arch with the deep-cut letters that said FIGHTERS ENTRANCE.

The usual crowd of fight fans were there, forty deep. None of them gave me a look; they had their eyes on the big, wide-shouldered Tunneys and Louises and Marcianos, and the hammed-up Herkys and Tarzans in their flashy costumes and big smiles, with their handlers herding them along like tugs nudging liners into dock. The gateman put out a hand to stop me when I started through the turnstile.

"It's me, Harley. Barney Ramm," I said. A couple of harness cops were standing a few feet away, looking things over. "Let me through; I'm late."

"Hah? Barney - "

"Keep it quiet; I'm a surprise."

"Where'd you dig up that outfit? On a used-Servo lot?" He looked me over like an inspector rejecting a wormy side of mutton. "What is it, a gag?"

"It's a long story. I'll tell it to you some time. Right now, how's about loaning me a temporary tag? I left my ID in my other pants."

"You pugs," he muttered, but

he handed over the pass. I grabbed it.

"Where's Lou Mitch, the starter?" I asked him.

"Try the Registry Office."

I shoved through a crowd of weigh-in men, service techs and arena officials, spotted Lou talking to a couple of trainers. I went over and grabbed his arm.

"It's me, Mitch, Barney Ramm. Listen, where's Gully? I need —"

"Ramm, you bum! Where you been? Where'd you pick up that hulk you got on? Who you think you are, missing the press weighin? Get downstairs on the double and dress out? You got twenty minutes, and if you're late, so help me, I'll see you busted out of the fight game!"

"Wha — who, me? Hold it, Lou, I'm not going out there in this condition! I just came down to —"

"Oh, a holdup for more dough, huh? Well, you can work that one out with the promoter and the Commissioner. All I know is, you got a contract, and I've got you billed for nineteen minutes from now!"

I started backing away, shaking my head. "Wait a minute, Lou —"

He jerked his head at a couple of the trainers that were listening in. "Grab him and take him down to his stall and get him into his gear! Hustle it!" I put up a brisk resistance, but it was all wasted 'effort. Ten minutes later I was standing in the chute, strapped into harness with knots tied in the straps for fit any a copy of the Afternoon Late Racing Special padding my helmet up off my ears, listening to the mob in the stands up above, yelling for the next kill. Me.

VII

They can talk all they want about how sensitive and responsive a good Servo is, but there's nothing like flesh and blood for making you know you're in trouble.

My heart was kicking hard enough to jar the championship medal on my chest. My mouth was as dry as yesterday's cinnamon toast. I thought about making a fast getaway over the barrier fence, but there was nobody outside who'd be glad to see me except the cops; besides which, I had a mace in my right hand and a fighting net in the left, and after all, I was Barney Ramm, the champ. I'd always said it was the man inside the Servo, not the equipment that counted. Tonight I had a chance to prove it - or a kind of a chance; an Org up against a fighting Servo wasn't exactly an even match.



But hell, when was it ever even? The whole fight game was controlled, from top to bottom, by a few sharpies like J. J. Malone. Nobody had ever slipped me the word to take a dive yet, but I'd stretched plenty of bouts to make 'em look good. After all, the fans paid good creds to see two fine-tuned fighting machines pound each other to scrap under the lights. An easy win was taboo. Well, they'd get an unexpected bonus tonight when I got hit and something besides hydraulic fluid ran out.

And then the blast of the bugles caught me like a bucket of ice water and the gate jumped up and I was striding through, head up, trying to look as arrogant as a hunting tiger under the glare of the polyarcs, but feeling very small and very breakable and wondering why I hadn't stayed in that nice safe jail while I had the chance. Out across the spread of the arena the bleachers rose up dark under the high lateevening sky streaked with long pink clouds that looked as remote as fairyland. And under the pooled lights, a big husky Servo was taking his bows, swirling his cloak.

He was too far away, over beyond the raised disk of the Circle, for me to be sure, but it looked like he was picking a heavy duty prod and nothing else. Maybe the word had gone out that I was in Org; or maybe he was good.

Then he tossed the cape to a handler and came to meet me, sizing me up on the way through the slit in his mask.

Maybe he was wondering what I had up my sleeve. If he was in on the fix, he'd be surprised to see me at all. He'd been expecting a last-minute sub, or just a straight default. If not, he'd have been figuring on me wearing my Big Charley, packed with all the booster gear the law allows. Instead, all he saw was an ordinary-looking five foot eleven frame with medium-fair shoulders and maybe just a shade too much padding at the belt line.

The boys back at Files had done right by me, I had to admit. The old Org was in better shape than when I'd filed it, over a year ago. I felt strong, tough and light on my feet; I could feel the old fighting edge coming on. Maybe it was just a false lift from the stuff the techs had loaded me full of, and maybe it was just an animal's combat instinct, an item they hadn't been able to dream up an accessory to imitate. Whatever it was, it was nice to have.

I reached the concrete edge of the Fighting Circle and stepped up on it and was looking across at the other fellow, only fifty feet away and now looking bigger than a Bolo Combat Unit. With the mask I wasn't sure, but he looked like a modified Norge Atlas. He was running through a fancy twirl routine with the prod, and the crowd was eating it up.

There was no law that said I had to wait for him to finish. I slid the mace down to rest solid in my palm with the thong riding tight above my wrist and gave the two foot club a couple of practice swings. So much for the warm-up. I flipped the net out into casting position with my left hand and moved in on him.

It wasn't like wearing a Servo; I could feel sweat running down my face and the air sighing in my lungs and the blood pumping through my muscles and veins. It was kind of a strange alive feeling — as if there was nothing between me and the sky and the earth and I was part of them and they were part of me. A funny feeling. A dangerous, unprotected feeling — but somehow not entirely a bad feeling.

He finished up the ham act when I was ten feet from him, swung to face me. He knew I was there, all right; he was just playing it cool. Swell. While he was playing, I'd take him.

I feinted with the net, then dived in, swung the mace, missed him by half an inch as he back-pedaled. I followed him close, working the club, keeping the net cocked. He backed, looking me over.

"Ramm — is that you in that get-up?" he barked.

"Naw — I couldn't make it, so I sent my cousin Julius."

"What happened, you switch brands? Looks like you must of got cut-rate merchandise." He ducked a straight cut and whipped the prod around in a jab that would have paralyzed my neuro center if he'd connected.

"New secret model a big outfit's trying out under wraps," I told him.

He made a fast move, and a long, slim rod I hadn't seen before whipped out and slapped me under the ribs. For a split second I froze. He had me, I was finished. A well-handled magnetic resonator could de-Gauss every micro-tape in a Servo — and his placement was perfect.

But nothing happened. There was a little tingle, that was all.

Then I got it. I wasn't wearing a Servo — and magnets
didn't bother an Org.

The Atlas was looking as confused as I was. He took an extra half-second recovering.

That was almost enough. I clipped him across the thigh as he almost fell getting back. He tried with the switch again, sawed it across my chest. I let him; he might as well tickle me with a grass stem. This time I got the net out, snarled his left arm, brought the mace around and laid a good one across his hip. It staggered him, but he managed to spin out, flip the net clear.

"What kind of shielding you got anyway, Ramm?" the Atlas growled. He held the rod out in front of his face, crossed his eyes at it, shook it hard and made one more try. I let him come in under my guard, and the shaft slid along my side as if he was trying to wipe it clean on my shirt. While he was busy with that, I dropped the net, got a two-handed grip in the mace, brought it around in a flat are and laid a solid wallop right where it would do him the most good - square on the hip joint.

I heard the socket go. He tried to pivot on his good leg, tottered and just managed to stay on his feet, swearing. I came in fast and just got a glimpse of the electro-pod coming up. Concentrating on the magnetic rod, I'd forgotten the other. I tried to check and slide off to the right, but all of a sudden blinding blue lights were popping all over the sky. Something came

up and hit me alongside the head, and then I was doing slow somersaults through pretty purple clouds, trying hard to figure which side was up. Then the pain hit. For a couple of seconds I scraped at my chest, reaching for circut breakers that weren't there. Then I got mad.

It was as if all of a sudden, nothing could stop me. The Atlas was a target, and all I wanted was just to reach it. If there was a mountain in the way, I'd pick it up and throw it over my shoulder. A charging elephant would be a minor nuisance. I could even stand up, unassisted — if I tried hard enough.

I got the feel of something solid under my hands, groped and found some more of it with my feet, pushed hard and blinked away the fog to see the Atlas just making it back onto his good leg. I had to rest a while then, on all fours. He stooped to twiddle a reset for emergency power to the damaged joint, then started for me, hopping hard enough to shake the ground. A little voice told me to wait....

He stopped, swung the prod up, and I rolled, grabbed his good leg, twisted with everything I had. It wasn't enough. He hopped, jabbed with the prod, missed, and I was on my feet now, feeling like I'd been skinned and soaked in brine. My breath burned my throat like a blow torch, and all round the crowd roar was like a tidal wave rolling across a sinking continent.

I backed, and he followed. I tried to figure the time until the pit stop, but I didn't know how long I'd been out here; I didn't have a timer ticking under my left ear, keeping me posted. And now the Atlas was on to what was going on. I knew that, when he reached for the show-knife strapped to his left hip. Against a Servo, that particular tool was useless, but he could let the cool night air into an Org's gizzard with it, and he knew it.

Then my foot hit the edge of the paved circle and I went down, flat on my back on the sand.

The Atlas came after me, and I scrambled back, got to my feet just in time. The knife-blade hissed through the air just under my chin.

"You've had it, Ramm," the Atlas said, and swung again. I tried to get the club up for a counter-blow but it was too heavy. I let it drop and drag in the sand. Through a dust-cloud we were making, I saw the Atlas fumbling with his control buttons. Tears welled up in his eyes, sluiced down over his face. He didn't like the dust any better

than I did. Maybe not as well . . .

I felt an idea pecking at its shell; a dirty idea, but better than none.

The mace was dangling by its thong. I slipped it free, threw it at him; it clanged off his knees and I stooped, came up with a handful of fine sand and as he closed in threw it straight into his face.

The effect was striking. His eyes turned to mud pockets. I stepped aside, and he went right past me, making swipes at the air with the big sticker, and I swung in behind him and tilted another handful down inside his neckband. I could hear it grate in the articulated rib armor as he came around.

"Ramm, you lousy little —" I took aim and placed a nice gob square in his vocabulary. He backed off, pumping emergency air to clear the pipes, spouting dust like Mount Aetna, but I knew I had him. The mouth cavity on just about every Servo in the market was a major lube duct; he had enough grit in his gears to stop a Continental Siege Unit. But his mouth was still open, so I funneled in another double handful.

He stopped, locked his knee joints, and concentrated on his problem. That gave me my opening to reach out and switch his main circuit-breaker off. He froze. I waited half a minute for the dust to clear, while the crowd roar died away to a kind of confused buzzing, like robbed bees.

Then I reached out, put a finger against his chest, and shoved — just gently. He leaned back, teetered for a second, then toppled over stiff as a lamp post. You could hear the thud all the way to the student bleachers. I held on for another ten seconds, just to make it look good, then kneeled over on top of him.

VIII

But I was too late," Gully Fishbein's voice was coming up out of a barrel; a barrel full of thick molasses syrup somebody had dumped me into. I opened my mouth to complain and a noise like "glug" came out.

"He's awake!" Gully yelped. I started to deny it, but the effort was too much.

"Barney, I tried to catch you, but you were already out there." Gully sounded indignant. "Cripes, kid, you should of known I wouldn't let 'em railroad you!"

"Don't worry about Ramm," a breezy voice jostled Gully's aside. "Boy, this is the story of the decade! You figure to go up against a Servo again in Org, when you get out of the shop—

I mean hospital? How did it feel to take five thousand volts of DC? You know the experts say it should have killed you. It would have knocked out any Servo on the market — "

"Nix, Baby!" Gully elbowed his way back in again. "My boy's gotta rest. And you can tell the world the Combo's out of business. Now anybody can afford to fight. Me and Barney have put the game back in the hands of the people."

"Yeah! The sight of that Atlas, out on its feet — and Ramm here, in Org, yet, with one finger"

I unglued an eyelid and blinked at half a dozen fuzzy faces like custard pies floating around me.

"We'll talk contract with you, Fishbein," somebody said.

".... call for some new regulations," somebody said.

".... dred thousand cees, first network rights."

".... era of the Servo in the arena is over ..."

"... and maybe not just in the arena."

".... hear what Malone says about this. Wow!"

"Malone," I heard my voice say, like a boot coming out of mud. "The cr... crook. It was him ... put the Sullivan ... up to it ..."

"Up to nothing, Barney," Gul-

ly was bending over me. "That was J. J. hisself in that Servo! And here's the payoff. He registered the satisfaction in his own name — and of course, every fighter in his stable is acting in his name, legally. So when you met Mysterious Marvin and knocked him on his duff you satisfied his claim. You're in the clear, kid. You can relax. There's nothing to worry about."

"Oh, Barney!" It was a new voice, a nice soft little squeal of a girl-voice. A neat little Org face with a turned-up nose zeroed in on me, with a worried look in the big brown eyes.

"Julie! Where — I mean, how . . . ? "

"I was there, Barney. I see all your fights, even if — even if I don't approve. And today — oh, Barney, you were so brave, so marvelous, out there alone, against that machine . . . " She sighed and nestled her head against my shoulder.

"Gully," I said. "Exactly how long have I got to stay in this place?"

"The Servo-tech" — I mean the doc — says a week anyway."

"Set up a wedding for a week from today."

Tulie jumped and stared at me.

"Oh, Barney! But you —
you know what I said . . . about
those zombies . . . "

"I know."

"But, Barney . . . " Gully didn't know whether to cry or grin. "You mean . . . ?"

"Sell my Servos," I said. "The whole wardrobe. My days of being a pair of TV eyes peeking out of a walking dummy and kidding myself I'm alive are over."

"Yeah, but Barney — a guy with your ideas about what's fun — like skiing, and riding the jet-boards, and surfing, and sky-diving — you can't take the risks! You only got the one Org Body!"

"I found out a couple of things out there tonight, Gully. It takes a live appetite to make a meal a feast. From now on, whatever I do, it'll be me doing it. Clocking records is okay, I guess, but there's some things that it takes an Org to handle."

"Like what?" Gully yelled, and went on with a lot more in the same vein. I wasn't listening, though. I was too busy savoring a pair of warm, soft, live lips against mine.

-KEITH LAUMER

HERESIES OF THE HUGE GOD

by BRIAN W. ALDISS

THE SECRET BOOK OF HARAD IV

I, Harad IV, Chief Scribe, declare that this my writing may be shown only to priests of rank within the Orthodox Universal Sacrificial Church and to the Elders Elect of the Council of the Orthodox Universal Sacrificial Church, because here are contained matters concerning the four Vile Heresies that may not be seen or spoken among the people.

The newest and vilest heresy, we must look in perspective over the events of history. Accordingly, let us go back to the First Year of our epoch when the World Darkness was banished by the Huge God, our truest, biggest

Lord, whom all honor and greatly fear.

From this present year, 910 H.G., it is impossible to recall what the world was like then. But from the few records still surviving we can gather something of those times and even perform the Mental Contortions necessary to see how the events must have looked to the sinners then involved in them.

The world on which the Huge God found himself was full of people and their machines, all of them unprepared for his visit. There may have been a hundred thousand times more people than there are now.

The Huge God landed in what is now the Sacred Sea, upon which in these days sail some of our most beautiful churches dedicated to his name. At that

time, the region was much less pleasing, being broken up into many states possessed by different nations. This was a system of land tenure practiced before our present policies of constant migration and evacuation were formed.

The rear legs of the Huge God stretched far down into Africa — which was then not the island it now is — almost touching the Congo River, at the sacred spot marked now by the Sacrificial Church of Basoko-Aketi-Ele, and at the sacred spot marked now by the Temple Church of Aden, obliterating the old port of Aden.

Some of the Huge God's legs stretched above the Sudan and across what was then the Libyan Kingdom, now part of the Sea of Elder Sorrow, while a foot rested in a city called Tunis on what was then the Tunisian shore. These were some of the legs of the Huge God on his left side.

On his right side, his legs blessed and pressed the sands of Saudi Arabia, now called Life Valley, and the foothills of the Caucasus, obliterating the Mount called Ararat in Asia Minor, while the Foremost Leg stretched forward to Russian lands, stamping out immediately the great capital city of Moscow.

The body of the Huge God, resting in repose between his mighty legs, settled mainly over

three ancient seas, if the Old Records are to be trusted, called the Sea of Mediterranean, the Red Sea, and the Nile Sea, all of which now form part of the Sacred Sea. He eradicated also with his Great Bulk part of the Black Sea, now called the White Sea, Egypt, Athens, Cyprus and the Balkan Peninsula as far north as Belgrade, now Holy Belgrade, for above this town towered the neck of the Huge God on his First Visit to us mortals, just clearing the roofs of the houses.

As for his head, it lifted above the region of mountains that we call Ittaland, which was then named Europe, a populous part of the globe, raised so high that it might easily be seen on a clear day from London, then as now the chief town of the land of the Anglo-French.

It was estimated in those first days that the length of the Huge God was some four and a half thousand miles, from rear to nose, with the eight legs each about nine hundred miles long. Now we profess in our Creed that our Huge God changes shape and length and number of legs according to whether he is Pleased or Angry with man.

In those days, the nature of God was unknown. No preparation had been made for his coming, though some whispers

of the millenium were circulating. Accordingly, the speculation on his nature was far from the truth, and often extremely blasphemous.

Here is an extract from the notorious Gersheimer Paper, which contributed much to the events leading up to the First Crusade in 271 H.G. We do not know who the Black Gersheimer was, apart from the meaningless fact that he was a Scientific Prophet at somewhere called Cornell or Carnell, evidently a Church on the American Continent (then a differently shaped territory).

"Aerial surveys suggest that this creature—if one can call it that—which straddles a line along the Red Sea and across southeast Europe, is non-living, at least as we understand life. It may be merely coincidence that it somewhat resembles an eight-footed lizard, so that we do not necessarily have to worry about the thing being malignant, as some tabloids have suggested."

Not all the vile jargon of that distant day is now understandable, but we believe "aerial surveys" to refer to the mechanical flying machines which this last generation of the Godless possessed. Black Gersheimer continues:

"If this thing is not life, it may

be a piece of galactic debris clinging momentarily to the globe, perhaps like a leaf clinging to a football in the fall. To believe this is not necessarily to alter our scientific concepts of the universe. Whether the thing represents life or not, we don't have to go all superstitious. We must merely remind ourselves that there are many phenomena in the universe as we conceive it in the light of twentieth-ceitury science which remain unknown to us. However painful this unwanted visitation may be, it is some consolation to think that it will bring us new knowledgeof ourselves, as well as of the world outside our solar system."

Although terms like "galactic debris" have lost their meaning, if they ever had one, the general trend of this passage is offensively obvious. An embargo is being set up against the worship of the Huge God, with a heretical God of Science set up in his stead. Only one other passage from this offensive mishmash need be considered, but it is a vital one for showing the attitude of mind of Gersheimer and presumably most of his contemporaries.

"Naturally enough, the peoples of the world, particularly those who are still lingering on the threshold of civilization, are full of fear these days. They see something supernatural in the ar-

rival of this thing, and I believe that every man, if he is honest, will admit to carrying an echo of that fear in his heart. We can only banish it, and can only meet the chaos into which the world is now plunged, if we retain a galactic picture of our situation in our minds. The very hugeness of this thing that now lies plastered loathsomely across our world is cause for terror. But imagine it in proportion. A centipede is sitting on an orange. Or, to pick an analogy that sounds less repulsive, a little gecko, six inches long, is resting momentarily on a plastic globe of the Earth which is two feet in diameter. It is up to us, the human race, with all the technological forces at our disposal, to unite as never before. and blow this thing, this large and stupid object, into the depths of space from whence it came. Good night."

Initial blasphemy are these:
that we can see here in this message from a member of the World
Darkness traces of that original
sin which—with all our sacrifices,
all our hardships, all our crusades—we have not yet stamped
out. That is why we are now at
the greatest Crisis in the history
of the Orthodox Universal Sacrificial Church, and why the time
has come for a Fourth Crusade.

The Huge God remained where he was, in what we now refer to as the Sacred Sea Position, for a number of years, absolutely unmoving.

For mankind, this was the great formative period of Belief, marking the establishment of the Universal Church, and characterized by many upheavals. The early priests and prophets suffered much that the Word might go round the World, and the blasphemous sects be destroyed, though the Underground Book of Church Lore suggests that many of them were in fact members of earlier churches who, seeing the light, transferred their allegiances.

The mighty figure of the Huge God was subjected to many puny insults. The Greatest Weapons of that distant age, forces of technical charlatanry, were called Nuclears. These were dropped on the Huge God-without having any effect, as might be expected. Walls of fire burnt against him in vain. Our Huge God, whom all honor and fear, is immune from earthly weakness. His body was clothed as it were with Metal here lay the seed of the Second Crusade-but it had not the weakness of metal.

His coming to earth met with immediate response from nature. The old winds that prevailed were turned aside about

his mighty flanks and blew elsewhere. The effect was to cool the center of Africa, so that the tropical rain forests died and all the creatures in them. In the lands bordering Caspana (then called Persia and Kharkov, say some old accounts), hurricanes of snow fell in a dozen severe winters. blowing far east into India. Elsewhere, all over the world, the coming of the Huge God was felt in the skies, and in freak rainfalls and errant winds, and month-long storms. The oceans also were disturbed, while the great volume of waters displaced by his body poured over the nearby land, killing many thousands of beings and washing away ten thousand dead whales.

The land too joined in the upheaval. While the territory under the Huge God's bulk sank, preparing to receive what would later be the Sacred Sea, the land roundabout rose up, forming small hills, such as the broken and savage Dolomines that now guard the southern lands of Ittaland. There were earthquakes and new volcanoes and geysers where water never spurted before and plagues of snakes and blazing forests and many wonderful signs that helped the Early Fathers of our faith to convert the ignorant. Everywhere they went, preaching that only in surrender to him lay salvation.

Many Whole Peoples perished at this time of upheaval, such as the Bulgarians, the Egyptians, the Israelites, Moravians, Kurds, Turks, as well as most of the South Slavs, Georgians, Croats, the sturdy Vlaks, and the Greeks and Cypriotic and Cretan races, together with others whose sins were great and names unrecorded in the annals of the church.

The Huge God departed from the world in the year 89, or some say 90. (This was the First Departure, and is celebrated as such in our Church calendar—though the Catholic Universal Church calls it First Disappearance Day.)

He returned in 91, great and aweing be his name.

Little is known of the period when he was absent from our Earth. We get a glimpse into the mind of the people then when we learn that in the main the nations of Earth greatly rejoiced. The natural upheavals continued, since the oceans poured into the great hollow he had made, forming our beloved and holy Sacred Sea. Great Wars broke out across the face of the globe.

His return in 91 halted the wars—a sign of the great peace his presence has brought to his chosen people.

But the inhabitants of the world at That Time were not all of our religion, though prophets moved among them, and many were their blasphemies. In the Black Museum attached to the great basilica of Omar and Yemen is documentary evidence that they tried at this period to communicate with the Huge God by means of their machines. Of course they got no reply-but many men reasoned at this time, in the darkness of their minds. that this was because the God was a Thing, as Black Gersheimer had prophesied.

The Huge God, on this his Second Coming, blessed our Earth by settling mainly within the Arctic Circle, or what was then the Arctic Circle, with his body straddling from northern Canada, as it was, over a large peninsula called Alaska, across the Bering Sea and into the northern regions of the Russian lands as far as the River Lena, now the Bay of Lenn. Some of his rear feet broke far into the Arctic Ice, while others of his forefeet entered the North Pacific Ocean—but truly to him we are but sand under his feet, and he is indifferent to our mountains or our Climatic Variations.

As for his terrible head, it could be seen reaching far into the stratosphere, gleaming with metal sheen, by all the cities

along the northern part of America's seaboard, from such vanished towns as Vancouver, Seattle, Edmonton, Portland, Blanco, Reno, and even San Francisco. It was the energetic and sinful nation that possessed these cities that was now most active against the Huge God. The weight of their ungodly scientific civilization was turned against him, but all they managed to do was blow apart their own coastline.

Meanwhile, other natural changes were taking place. The mass of the Huge God deflected the earth in its daily roll, so that seasons changed, and in the prophetic books we read how the great trees brought forth their leaves to cover them in the winter, and lost them in the summer. Bats flew in the daytime and women bore forth hairy children. The melting of the ice caps caused great floods, tidal waves and poisonous dews, while in one night we hear that the waters of the Deep were moved, so that the tide went out so far from the Malayan Uplands (as they now are) that the continental peninsula of Blestland was formed in a few hours of what had previously been separate Continents or Islands called Singapore, Sumatra, Indonesia, Java, Sydney, and Australia or Austria.

With these powerful signs, our priests could Convert the People,

and millions of survivors were speedily enrolled into the Church. This was the First Great Age of the Church, when the word spread across all the ravaged and transformed globe. Our institutions were formed in the next few generations, notably at the various Councils of the New Church (some of which have since proved to be heretical).

We were not established without some difficulty. Many people had to be burned before the rest could feel the faith Burning in Them. But as generations passed, the True Name of the God emerged over a wider and wider area.

Only the Americans still clung largely to their base superstition. Fortified by their science, they refused Grace. So in the Year 271 the First Crusade was launched, chiefly against them but also against the Irish, whose heretical views had no benefit of science. The Irish were quickly Eradicated, almost to a man. The Americans were more formidable, but this difficulty served only to draw the people closer and unite the Church further.

This First Crusade was fought over the First Great Heresy of the Church, the heresy claiming that the Huge God was a Thing not a God, as formulated by Black Gersheimer. It was suc-

cessfully concluded when the leader of the Americans, Lionel Undermeyer, met the Venerable World Emperor-Bishop, Jon II, and agreed that the messengers of the Church should be free to preach unmolested in America. Possibly a harsher decision could have been forced, as some commentators claim, but by this time both sides were suffering severely from plague and famine, the harvests of the world having failed. It was a happy chance that the population of the world was already cut by more than half, or complete starvation would have followed the reorganization of the seasons.

In the churches of the world, the Huge God was asked to give a sign that he had witnessed the great victory over the American unbelievers. All who opposed this enlightened act were destroyed. He answered the prayers in 297 by moving swiftly forward only a comparatively Small Amount and lying Mainly in the Pacific Ocean, stretching almost as far south as what is now the Antarter, what was then the The Tropic of Capricorn, and what had previously been the Equator. Some of his left legs covered the towns along the west American seaboard as far south as Guadaljara (where the impression of his foot is still marked by the Temple of the Sacred Toe), in-

GALAXY

cluding some of the towns such as San Francisco already mentioned. We speak of this as the First Shift; it was rightly taken as a striking proof of the Huge God's contempt for America.

This feeling became rife in America also. Purified by famine, plague, gigantic earth tremors and other natural disorders, the population could now better accept the words of the priests, all becoming converted to a man. Mass pilgrimages were made to see the great body of the Huge God, stretching from one end of their nation to the other. Bolder pilgrims climbed aboard flying airplanes and flew over his shoulder, across which savage rainstorms played for a hundred years Without Cease.

Those that were converted became More Extreme than their brethren older in the faith across the other side of the world. No sooner had the American congregations united with ours than they broke away on a point of doctrine at the Council of Dead Tench (322). This date marks the beginning of the Catholic Universal Sacrificial Church. We of the Orthodox persuasion did not enjoy, in those distant days, the harmony with our American brothers that we do now.

The doctrinal point on which the churches split apart was, as is well known, the question of whether humanity should wear clothes that imitated the metallic sheen of the Huge God. It was claimed that this was setting up man in God's Image; but it was a calculated slur on the Orthodox Universal priests, who wore plastic or metal garments in honor of their maker.

This developed into the Second Great Heresy. As this long and confused period has been aptly dealt with elsewhere, we may pass over it lightly here, mentioning merely that the quarrel reached its climax in the Second Crusade, which the American Catholic Universals launched against us in 450. Because they still had a large preponderance of machines they were able to force their point, to sack various monasteries along the edge of the Sacred Sea, to defile our women and to retire home in glory.

Since that time, everyone in the world has worn only garments of wool or fur. All who opposed this enlightened act were destroyed.

It would be wrong to emphasize too much the struggles of the past. All this while, the majority of people were peacefully about their worship, being sacrificed regularly, and praying every sunset and sunrise (whenever they might occur) that the Huge God would leave our

world, since we were not worthy of him.

The Second Crusade left a trail of troubles in its wake. The next fifty years were, on the whole, not happy ones. The American armies returned home to find that the heavy pressure upon their western seaboard had opened up a number of volcanoes along their biggest mountain range, the Rockies. Their country was covered in fire and lava, and their air filled with stinking ash.

Rightly, they accepted this as a sign that their conduct left much to be desired in the eyes of the Huge God (for though it has never been proved that he has eyes, he surely Sees Us). Since the rest of the world had not been Visited with punishment on quite this scale, they correctly divined that their sin was that they still clung to technology and to the weapons of technology which was against the wishes of God.

With their faith strong within them, every last instrument of science, from the Nuclears to the Canopeners, was destroyed, and a hundred thousand virgins of the persuasion were dropped into suitable volcanoes as propitiation. All who opposed these enlightened acts were destroyed, and some were even ceremonially eaten.

Type of the Orthodox Universal faith applauded our brothers' whole-hearted action. Yet we could not be sure they had purged themselves enough. Now that they owned no weapons and we still had some, it was clear we could help them in their purgation. Accordingly, a mighty armada of one hundred and sixtysix wooden ships sailed across to America, to help them suffer for the faith-and incidentally to get back some of our loot. This was the Third Crusade of 482, under Jon the Chubby.

While the two opposed armies were engaged in battle outside New York, the Second Shift took place. It lasted only a matter of five minutes.

In that time, the Huge God turned to his left flank, crawled across the Atlantic as if it were a puddle, moved over Africa, and came to rest in the south Indian Ocean, demolishing Madagascar with one rear foot. Night fell Everywhere on earth.

When dawn came, there could hardly have been a single man who did not believe in the power and wisdom of the Huge God, to whose name belongs all Terror and Might. Unhappily, among those who were unable to believe were the contesting armies who were one and all swept under a Wave of Earth and Rock as the God passed.

In the ensuing chaos, only one note of sanity prevailed—the sanity of the Church. The Church established as the Third Great Heresy the idea that any machines were permissible to man against the wishes of God. There was some doctrinal squabble as to whether books counted as machines. It was decided they did, just to be on the safe side. From then on, all men were free to do nothing but labor in the fields and worship, and pray to the Huge God to remove himself to a world more worthy of his might. At the same time, the rate of sacrifices was stepped up, and the Slow-Burning Method was introduced (499).

Now followed the great Peace, which lasted till 900. In all this time, the Huge God never moved; it has been truly said that the centuries are but seconds in his sight. Perhaps mankind has never known such a long peace. four hundred years of it-a peace that existed in his heart if not outside it, because the world was naturally in Some Disorder. The great force of the Huge God's progress halfway across the world had altered the progression of day and night to a considerable extent. Some legends claim that before the Second Shift, the sun used to rise in the east and set in the west - the opposite of today's natural order.

Gradually, this peaceful period saw some re-establishment of order to the seasons, and some cessation of the floods, showers hailstorms, blood. quakes, deluges of icicles, apparitions of comets, volcanic eruptions, miasmic fogs, destructive winds, blights, plagues of wolves and dragons, tidal waves, yearlong thunder storms, lashing rains and sundry other scourges of which the scriptures of this period speak so eloquently. The Fathers of the Church, retiring to the comparative safety of the inland seas and sunny meadows of Gobiland in Mongolia, established a new orthodoxy well calculated in its rigor of prayer and human burnt-offering to invite the Huge God to leave our poor wretched world for a better and more substantial one.

So the story comes to the present—to the year 900, only a decade past as your scribe writes. In that year, the Huge God left our earth!

Recall, if you will, that the First Departure in 89 lasted only twenty months. Yet the Huge God has been gone from us already half that number of years! We need him Back. We cannot live without him, as we should have realized Long Ago had we not blasphemed in our hearts!



Here is music composed on computer and transducers, ranging from computer-played versions of Christmas carols and rounds to the complex sounds that offer a new dimension in musicology. Composers include Dr. John R. Pierce, Dr. M. V. Mathews, David Lewin, James Tenny, etc. 18 selections on a 12-inch, high-fidelity, long-playing record produced by Decca. A "must" for your record library and a conversation piece for all occasions. Priced \$4.95 postpaid—send in the coupon today.

Galaxy Publishing Corp. 421 Hudson Street, New York City 10014

Yes, send me my 12-inch hi-fi record of Music from Mathematics right away. I enclose check or money order for \$4.95.

Name	+		•	•	•	+	è	ù		4	á		-	ŧ						a	a
Address	w	4		10			*	*	*						•		•	•	2t		•

City & State Zip Code (Offer good in U. S. A. Only) On his going, he propelled our humble globe on such a course that we are doomed to deepest winter all the year; the sun is far away and shrunken; the seas Freeze half the year; icebergs march across our fields; at midday, it is too dark to read without a rush light; nothing will grow. Woe is us!

Yet we deserve everything we get. This is a just punishment, for throughout all the centuries of our epoch, when our kind was so relatively happy and undisturbed, we prayed like fools that the Huge God would leave us. And now he has.

I ask all the Elders Elect of the Council to brand those prayers as the Fourth and Greatest Heresy, and to declare that henceforth all men's efforts be completely devoted to calling on the Huge God to return to us at once.

I ask also that the sacrifice rate be stepped up again. It is useless to skimp things just because we are running out of women.

I ask also that a Fourth Crusade be launched—fast, before the air starts to freeze in our nostrils!

-Brian W. Aldiss





SCHEHERAZADE'S ISLAND

Sunday afternoon during which periods of heavy downpour and mere rain chased one another through the hours until darkness made me resolve to straighten out my library. This is a recurring but nonperiodic resolution that invariably miscarries, though the reasons are not always the same. This time it miscarried because I came across a book I had never really read: Robert Drury's Journal, "printed for Tho. Worrall, at Judge Coke's Head, near the Temple-Exchange Coffee-House in Fleet Street, London," in 1728.

Robert Drury, a shipwrecked British sailor, had been in Madagascar as a captive for fifteen years, until rescued by Capt. William Mackett. His "journal" was not really what the name implies, because it was written by him from memory after his return "on eight Quires in Folio, each of near an hundred Pages", that had to be "contracted" by an editor.

Madagascar is not "the land of the man-eating tree" since there is no such thing. But it is the home of impressive plants and of many very interesting animals, and I was curious what an obviously intelligent but scientifically illiterate man had to say about them. In that respect the book was a disappointment, for Drury speaks only of cattle, sheep, goats and pigs - "eaten only be the very Poor" - and the only zoological item is a statement that the large "serpent" is without venom. He does apologize at one point, saying that a "person of Curiosity"

might have made many observations but that he did not, partly because he was too young (about 16 when he got there) and partly because his status as a slave forced him to think of day-today things most of the time.

But - and this is what happens when you clean up your library - I also came across another volume, namely No. 17 of the Memoires de l'Academie Malgache, printed in 1934 and written by Professor C. Lamberton, dealing with an especially interesting aspect of the fauna of Madagascar, namely its "subfossil" animals. The word "subfossil" is one of those terms that is difficult to explain. It refers to bones that are not yet old enough to have become true fossils. But that does not say anything definite about their age. Depending on climate, area and circumstances, "sub-fossil" might mean as little as 500 years or as much as 5000 years and even more. In the case of the sub-fossil bones of Madagascar the age limits are probably 500 years at one end and 2000 years at the other. One important fact should be mentioned right now: there are no human remains among these bones.

Madagascar is one of the large islands on our globe. It is about 1000 miles long with an

average width of 250 miles (360 miles at the widest point) and an area of 227,760 square miles.

It could have been discovered about the year 595 B.C. when a party of Phoenicians in the pay of the Egyptian ruler Necho sailed south along the east coast of Africa, rounded the southern tip of the continent and reached Egypt again by sailing through the Pillars of Hercules (Strait of Gibraltar) into the Mediterranean. But the Phoenicians, like all the sailors of antiquity, sailed within the sight of land if at all. possible and therefore passed the Mozambique 250-mile wide Channel that separates Madagascar from the African continent without ever guessing that there was land to their left.

At that time Madagascar was, in all probability, still uninhabited by men. The dates of the first discovery and of the first settlements are not known. Most of the later inhabitants were of Malayo-Polynesian stock. And there were a few early Arab settlements; the first Westerner to see the island was the Portuguese captain Diego Diaz on August 10, 1500 A.D.

Whatever was known about Madagascar prior to 1500 must have come from Arab sources, including the first reference to the island in a western book, namely the travel book of Marco Polo

which was written, or rather dictated, in 1298. He had not been been there himself and the dependence on Arab sources is shown by the statement that "the inhabitants are Saracens, or followers of the law of Mohammed." The numerous other inhabitants are not mentioned at all. While the location and the size of the island are given correctly, everything else Marco Polo says about Madagascar is wrong. What he does say-namely that elephants abound, that wild boars, giraffes and asses are numerous—applies to the African mainland on the other side of the channel. Presumably his Arabs had told him about life on their far southern outposts without being too specific of what was where.

As a source for the early history of Madagascar, Marco Polo's book is without value, but this chapter contains the first western mention of the "rukh" (the Roc of the Arabian Nights) as a bird that flies to Madagascar "from the southern regions" at a certain season. "Persons who have seen this bird assert that when the wings are spread, they measure sixteen paces in extent, from point to point; and that the feathers are eight paces in length, and thick in proportion." Marco Polo then went on to say that the Great Khan, being very curious about such a huge bird, sent

messengers to the island under a pretext. When the messengers returned they brought with them a feather of the rukh, "positively affirmed to have measured 90 spans, and the quill part to have been two palms in circumference."

It is now generally believed that the "feather" brought to the Great Khan was actually the frond of a Raphia palm. When dry these fronds do look like enormous bird feathers, though their size is only about half of what the report says. The somewhat surprising point is that Marco Polo, a merchant used to weights and measures, made no effort to reconcile the different figures he had heard about. If we take a "pace" to be about three feet, then the eight paces of the first story are about 25 feet, while the 90 spans of the "feather" are about 60 feet.

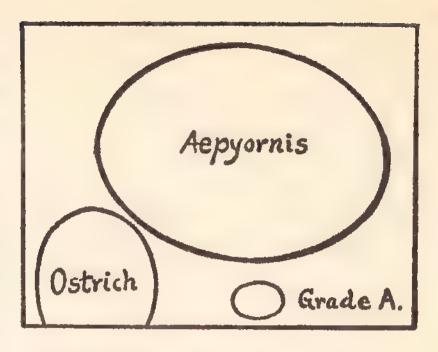
To western readers the Roc is known from the tales of Scheherazade only, and it would be nice if it were possible to establish a date for them. Unfortunately this can not be done because they were not collected into a whole until quite late, during the fifteenth century of our calendar. The earliest mention of the existence of these tales is in Meadows of Gold and Mines of Gems by Abu-al-Hasan Ali al-Mas'udi who died in 956 A.D. The learn-

ed al-Mas'udi had no use for them, he called them the Book the Thousand Khurafas ("whoppers") and just to maintain the reputation of the Arabs he said that they were translations from the Persian and the Greek. It was not so much the foreign origin of the tales that annoyed al-Mas'udi; as a strict Mohammedan he was against any kind of fiction. Even now some of the stricter sects of the Mohammedans are said to condemn all books that are not either religious of strictly factual, such as medical works. The chance mention of the tales is even less helpful since nobody has the faintest idea of whether the tales referred to by al-Mas'udi are the ones we know or whether he had another set of tales in mind.

In the Arabian Nights the Roc appears in Sindbad's second voyage, and no location is given, except that it was an island in a tropical climate. Because of Marco Polo's remarks Sinbad's island was identified with Madagascar by later commentators. Of course nobody took either Marco Polo's Arab sources or the unknown compiler of the tales of Sindbad seriously; but why Madagascar? There was no answer to that question. But as time went on Madagascar continued to contribute stories of large birds.

Drobably the earliest one in modern times is a short remark in the Histoire de la Grande Isle de Madagascar, published in 1658 by the French colonizer Admiral Etienne de Flacourt, who lived on Madagascar for some time and also compiled a dictionary of the Malagassy language. He just said that there was a very large bird living in the loneliest places of the island and laying eggs like an ostrich egg. The natives, he added, call this bird vouroupatra, but since the native word for bird is voron either the admiral or his printer misspelled at least one letter. Etienne de Flacourt's remark was disregarded. Nobody was too much interested in a large bird that did not seem to interfere with any human activity.

During the decade from 1830 to 1840 Europeans travelling to the island—most of them Frenchmen-suddenly came across enormous egg shells. One saw a half shell being used as a bowl. He tried to buy it, but the natives needed it too badly and would not sell. A few years later, in 1840, a traveller named Goudot found remains of large eggs and took them with him to Paris. At about the same time a French merchant named Dumarele saw a nearly whole egg. He later told the story to the ship's doctor of H.M.S. Geyser, one John Joliffe,



1. The big egg of Aepyornis.

who entered it in his private journal as follows:

Leven, on the north-west of the egg, the production of an un-

"M. Dumarele casually mentioned . . . that he saw at Port island, the shell of an enormous known bird inhabiting the wilds of the country, which held the almost incredible quantity of thirteen wine quart bottles of fluid!!!, he having himself carefully measured the quantity. It was of the colour and appearance of an ostrich egg, and the substance of the shell was about the thickness of a Spanish dollar, and very hard in texture. It was brought on deck by the natives to be filled with rum, having a tolerably large hole at one end, through which the contents of the egg had been extracted, and which served as the mouth of the vessel. M. Dumarele offered to purchase the egg from the natives, but

they declined selling it, stating that it belonged to their chief, and that they could not dispose of it without his permission. The natives said the egg was found in the jungle and observed that such eggs were very very rarely met with, and that the bird which produces them is still more rarely seen."

Thus doctor Joliffe in 1848. He did not doubt Dumarele's word and admitted that there might be such eggs, but thought it equally possible that Dumarele had been "imposed upon by the roguery of the natives."

In London they were less skeptical because in 1839 Sir Richard Owen had received a large bone from New Zealand which he found to be the leg bone of a very large ostrich-like bird, the first of the moas to become If New Zealand had known. been inhabited by enormous birds, why not Madagascar? Its existence became "official" in 1851 when the French merchant Captain Abadie found three eggs and some bone fragments on the southwest coast of the island and brought them to the Academie des Sciences in Paris. The largest of the eggs measured about 151/2 by 12½ inches, indicating a capacity equal to half a dozen ostrich eggs or nearly 150 hen's eggs. The bones hinted at an ostrich-like bird, but larger. In or-

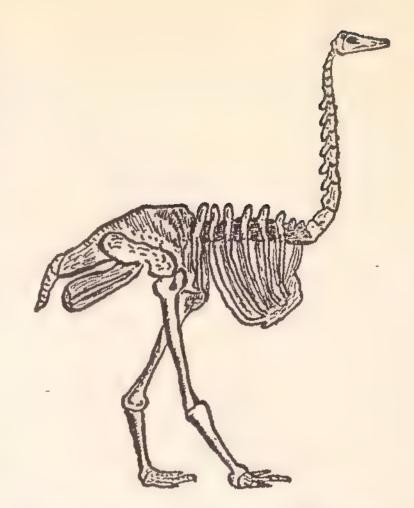
der to have a handy and international label for the still poorly known big bird from Madagascar, the French naturalist Isidore Geoffroy St. Hilaire named it Aepyornis, from the Greek words aipys ("high" or "tall") and ornis ("bird"), adding maximus as a generic name. This would translate as "the tallest of the tall birds" but this was a mistake. Isidore Geoffroy St. Hilaire assumed twice the dimensions of the living ostrich, making Aepyornis 16 feet tall; actually, as we now know, the bird carried its head only about ten feet above the ground. Some of the New Zealand moas were taller (and some more recently discovered South American and African forms may have been taller still), but Aepyornis was probably the most massive bird that ever lived: a full grown specimen may have weighed close to pounds.

Ponds and swamps later yielded bones of Aepyornis in a perfect state of preservation. There were three species of Aepyornis. Aepyornis hildebrandtii was hardly larger than an African ostrich, though more massive. The second, Aepyornis medius was bigger and Aepyornis maximus, the largest.

Everybody, after the gigantic eggs of Aepyornis with their

2½ gallon capacity had been definitely established, was agreed that the egg of the Roc had been discovered. They were enormous in size and they were found precisely where Marco Polo's Arab sources said: namely on Madagascar. But this identification left two questions open. One was the more scientific one of when Aepyornis became extinct, the other wondered about the statement that the Roc was supposed to have looked like an eagle; Aepyornis certainly did not look that way.

As regards the time of its extinction we can probably accept Etienne de Flacourt's statement that they were still alive in 1650, even though the admiral had not seen them himself. Remember that the French merchant Dumarele was also told-in about 1840—that the birds could still be seen, though very rarely. One of the reasons why this does not sound incredible is the way Dumarele talked about the egg as if it had been a fresh egg that had been emptied of its natural contents by the native for the purpose of making a large jug. It is possible, therefore, that the last survivors of the Aepyornis tribe still existed a little over a century ago. Since then the swampy forests inhabited by the birds seem to have been drained or disappeared for natural rea- The surviving types of



2. Skeleton of Aepyornis maximum.

sons. At any event the chance of still discovering survivors is so close to zero that one doesn't have to think about it.

Now for the other question: if the egg of the Roc was the egg of Aepyornis, how come the fully grown bird was described as having the shape of an eagle, or at least a flying bird? The early Arabs that had established settlements or trading posts on Madagascar must have seen them from time to time, though probably only from a distance because the Arab settlements were at the coast while the birds lived inland.

I am not digressing if I speak about the feathers for a moment.

kiwi to the South American rhea, usually have hair-like feathers. The decorative "plumes" of the African ostrich are an exception. It is very likely, therefore, that the large birds of Madagascar also had hair-like feathers, producing an egg-shaped outline of the body, with a neck and two legs sticking out. Unfortunately we don't know whether the neck was naked or covered with feathers.

At any event the outline of Aepyornis, stalking around in a shallow lake with its head down looking for food might well have reminded the Arabs of a chick. But if these large birds, not too clearly seen, were chicks, then the "full grown" bird would have to have about the dimensions of the Roc with an assumed wingspread of about 50 feet. One did not have to actually see the full grown bird. The sight of its monstrous "chicks" was enough to start the story.

The fauna of Madagascar must have undergone quite considerable changes during the last thousand years. A thousand years ago all three species of Aepyornis certainly were still alive and so was Mullerornis, a large flightless bird related to the cassowary, of about the same dimensions as today's ostrich. A large tortoise, named Testudo

grandidieri, must have rather common a thousand years ago. Its carapace measured more than three feet in length and since all large land tortoises are edible the reason for the disappearance of this type does not need a natural catastrophe to be explained. In fact, it may not have disappeared completely. Every once in a while there is a story that is best and most easily explained by such a large and now rare tortoise. The current crocodile is identical with that of Africa, though somewhat smaller; but a larger form, called Crocodylus robustus, with a skull 21/2 feet in length, is now extinct. The hippopotamus of Madagascar does not seem to have been mentioned by anybody-unless it went under the mistaken name of giant hog - but sub-fossil bones indicate that the animal was a good deal smaller than the living African version.

But the typical animals of Madagascar are the lemurs, ranging in size from that of a rat to a very large cat. They are primates like monkeys, apes and people, but they are at the bottom of the primate hierarchy. Most are nocturnal, producing plaintive moans and cries and having large eyes that glow weirdly when a beam of light strikes them. That they struck observers, even professional zo-

52



3. The Indris, largest living lemur (over three feet tall) and also the nearest living relative of Megaladapis.

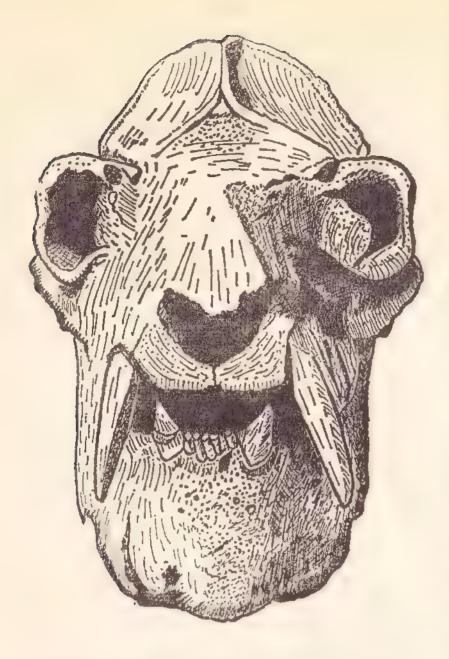
ologists, as weird is indicated even by their scientific name, for "lemurs" is derived from the Latin lemures, which meant the shades of the dead, or ghosts.

The size range mentioned applies to the living forms only. There were others that were larger, and I feel quite sure that one of them provided Scheherazade with another ingredient for many of her tales: the afreets.

Plassical writers of the Arab world have occasionally tried to classify the non-material beings of their mythology, the djinns, ghouls, afreets and so forth, the question being whether they are of Adam's seed or not. It is all quite unclear. The angels are taken to be a special creation of Allah; the others are permitted to exist. But the authors seem to have been uncertain not only in their ideas but in their terminology as well and since this is not my field I am going to use a sentence often used by al-Mas'udi when he was called upon to make a decision. He would then write: "some say this, some say that, God knows best." But in general the djinns seem to be personified dust swirls that materialize into something dreadful. The afreets give the impression of being somewhat more substantial, "with teeth like stones, with eyes like lamps."

Of course the afreets were pure imagination. There was nothing in nature that would suggest such a being. There wasn't, that is, until scientists began to find sub-fossil bones, mainly in the southern part of Madagascar.

Then the Transactions of the Royal Society of London received a paper by Forsyth Major entitled: "On Megaladapis madagascariensis, an extinct gigantic



4. Skull of Megaladapis edwardsi.

Lemuroid from Madagascar." This was in 1894; ten years later there was definite evidence that this form had been the smallest of three species. The largest, called *Megaladapis Edwardsi*, was first described by Dr. Ludwig Lorenz von Liburnau in the publications of the Imperial Academy of Science in Vienna (1905).

The age of the large now-extinct lemuroids is once more "sub-fossil"; they were certainly still alive at the time Julius Caesar reformed the calendar.

And a passage in Etienne de Flacourt's book, talking about an animal with the wonderful name of tratratratra—"as big as a two-year-old calf, with a round head and a man's face: the forefeet like an ape's and the hind-feet also like an ape's, with frizzy hair and a short tail"—must refer to one of the large lemuroids, though the specific form may not be known yet to science.

Professor Lamberton, who has made a tentative reconstruction, showed the Megaladapis in a four-footed position, but he had to say that a good deal of his reconstruction is hypothetical. One of the unknown factors is the number of vertebrae in the spinal column. The skull is well known, as are the hands and feet, but there seems to be no specimen that was found complete and some mistakes are therefore possible. But even if (which is not certain yet) Megaladapis often walked on all fours, a lemuroid is likely to straighten out on occasion, even if it might have had to hold on to a tree trunk or tree branch to do so.

In an upright position even the smallest species of Megaladapis was taller than a man. Admiral de Flacourt said that his tratratratra is as afraid of people as people are of it. But its appearance was not trust-inspiring and just imagine the feelings of an

GALAXY

Arab (or any other stranger to Madagascar) of the year 800, say, when he ran into a Megaladapis at night. There it stood, vaguely man-like in shape when upright, with man-like hands, black or at least dark in color, with large fangs hanging out of its mouth and its eyes gleaming in the light of the man's torch.

"With teeth like rocks and eyes shining like lamps" Since

each was afraid of the other there was mutual flight, but one cannot blame the man for assuming that he had "escaped". He probably thanked Allah for his delivery and then went to his fellow traders to tell what he had seen—and now the concept of the afreet that may have existed before acquired a bodily shape.

-WILLY LEY



When Jack Vance won his Hugo for The Dragon Masters, it was for a story which had originally appeared in Galaxy. Over the years, many of Jack's best-loved stories have been in this magazine — most recently The Last Castle in our April issue — and it is our pleasure to report that the end is not yet in sight. Next issue has his newest novel. In it he continues the vendetta of a man bred for vengeance against the Demon Princes who rule the outlaw reaches of the Galaxy. It's called The Palace of Love — and love, you will see, can be a terribly deadly weapon!

Anne McCaffrey joins us for the first time next issue, too, with The Ship Who Killed. Larry Niven has a novelette of Mars (with craters!) and the men who will explore it, called How the Heroes Die. And we'll have Willy Ley and Algis Budrys, of course, with their regular columns, and as many other stories as we can squeeze in.

One of which will, we hope, be the Arthur C. Clarke A Recursion in Metastories which we announced some months ago. To those who have been waiting patiently, our apologies — but you know it isn't easy to find a spot for what its author calls the longest story ever written! (In spite of the fact that it actually runs something under a thousand words. . . .)

by JAMES BLISH and NORMAN L. KNIGHT

Illustrated by MORROW

The city was packed with people — and it was doomed to destruction!

I

It was late in the summer of 2794 that Biond Smith—who was and would remain chief of the Disaster Plans Board until the moment he allowed a disaster to get away from him—called Jothen Kent home from an Australian vacation by announcing the end of the world.

Jothen, who had been bubbling away contentedly in a scuba rig off Triton Reef, had waited eight years for that vacation, but as senior water-engineer of a standby city—one that stood empty until some threatened part of the world's ten thousand billion people had to be decanted into it—he knew all along that he was subject to recall, by storm, by earthquake, by famine or by

something he had not been trained to imagine. On the other hand, he did not see what good a stand-by city would be at the end of the world, so he was a little resentful at the interruption.

One look at Biond, however, and he was worried. World Directors, it was axiomatic, never sounded scared. But Biond was at best nervous and distracted. And small wonder. As the story came out of him in small blurts and pieces of sentences, it began to appear to Jothen that he did have a real block-buster on his hands.

"Or a planetbuster," Biond agreed. "This is going to be a fearful business, Jothen. I suppose it was inevitable sooner or later, but still and all we've never been really prepared for it. We wouldn't have been . . . Damn, I'd better tell you what I'm talking about."

"It wouldn't hurt," Jothen said, watching Biond worriedly.

"Well, it's like this. We're going to be hit by a meteor. One hell of a meteor—effective diameter more than a mile."

"That doesn't sound very big."

"My God Jothen! There's been nothing like it since the Siberian meteorite, eight centuries back, and that was probably rather small. Really we've

been very lucky to have gotten away without a major hit for so long. It's going to fall in Canada, and there will be nothing left of the Northwest after that. Nothing!"

"From a bolide only a mile across? It must be coming in fast—but, Biond, I don't have any expertise in this area. What do we know about this thing?"

Biond picked up a stylus and began doodling nervously. "A fair question. Its name is Flavia, after the wife of the astronomer who discovered it, long ago. It was one of those odd little asteroids that used to scare people by coming within half a million miles of the Earth every so often and then got lost before anybody'd worked out its orbit. Physically, it's a granite tetrahedron about fourteen miles along the long axis and about eight miles in diameter at the waist. We think it's a crustal fragment of Neferetete II, the big asteroidal protoplanet of which Ceres was probably a moon."

Biond threw the stylus down and stared belligerantly at Jothen. "But not one word of this stuff does us any good. We might as well not know it at all."

"I'm not so sure," Jothen said with careful calmness. "You

said that it's a mile across—and then, you said it's eight miles across, the short way. Are you trying to break it up, Biond?"

"God knows we're trying to break it up," Biond said, with bitter energy. "We thought we might bomb it, but when we thought about what might happen when a radioactive cloud three hundred miles in diameter hit us, we gave up that idea. Instead, we have men drilling the rock down to the bottom and planting charges in it, for a start-three of them killed already-in the hope of fragmenting it, spreading it out. And I think we can us lasers on one side of it, to boil off some of it and deflect it a little by vapor pressure.

"But when it hits, Jothen, when it hits, it's going to be about a mile in diameter all the same. And do you know what that means, Jothen? Do you know what's going to become of our history-long effort to accommodate all our people? It will all come to nothing, Jothen. Nothing."

"It'll be bad, I don't doubt that. But why that bad?"

"I have to exaggerate," Biond admitted, "otherwise I can't hope not to be surprised. Physically, only central Canada and the Great Lakes area are likely

to suffer direct shock. But that means the destruction of about fifty moderate-sized cities and maybe ten large ones. I can see very little hope of saving the Twin Cities complex, for instance, even though a lot of it will probably be left standing; communications and supplies are going to be knocked out for a long time. Sheer structural damage is only the beginning of the story. That's why I'm going to need your city right away and all the other stand-by cities in the Middle West."

"You'll have to evacuate the Twin Cities, and so on."

"Oh, yes, but it's worse than that, Jothen—much worse. We're also going to have to evacuate the Chicago group."

"It can't be done!"

"My sentiments exactly. However, there it is. Any impediments in your town? Just what shape is Gitler in, anyhow?"

"Loaded," Jothen said with a sudden shock of realization. "The Jones Convention is still going on there—or should be—if nothing's disbanded it ahead of schedule, while I was in Australia."

"No, not that I've heard," Biond said. "A relatively small family convention, I seem to recall, though. That's to our advantage."

"Yes, I think I can get them all out of town in no more than three weeks."

"One week," Biond said.

"Biond, that really is impossible. Sure it's a small family—but there must be a million of them in Gitler, and my staff is small."

"One week," Biond said stonily. "Get 'em out. By the end of three weeks, I'll be well started moving in refugees from Chicago. But I don't want any of the Joneses trampled in the rush, either. Get on it, Jothen. Our friend Flavia is on her way—and she won't wait."

A torrent of faces poured down the penstock of Goring Boulevard distorted with roars of almost religious joy and capped with funny hats. From a glastic-clad overlook just under the roof of the street, Jothen tried to keep his mind on his job, but failed miserably. He had never before seen so many people in all his life, and he did not know whether to be fascinated or terrified.

Like most of the world's thousands of small towns, the leaf-shaped, half-buried sprawl of Gitler, Mo., had been designed to hold ten million people comfortably, but until the Jones Convention it had never been used. Its echoing,

dustless emptiness would have seemed oppressive to the ordinary citizen of the pullulating world, but to Jothen, who had spent his working life in Gitler, it was normal.

The handful of some ten thousand technicians who maintained the stand-by city-pending disaster - was simply swallowed up in the general desertion. They had their own selfsufficient village just under the city's flyport, complete and static-for children had to leave when they came of age, so that Gitler would not build up an indigenous population of its own -but on duty they almost never saw each other in groups of more than two or three at a time. In the world at large, that much privacy, impossible except in one's own apartment, would in fact have been a little frightening.

But Jothen belonged to the world's privileged class; he was not used to crowds.

The Jones Convention went by him regardless, like an avalanche. Plump boys plunking two-stringed kithera, wild-eyed old men charging through the air on super-charged autocrutches, fat sterile women parading squeakily, talking animaldolls with heads like babies and twitchingly animated grotesque family totems of all kinds—

many so tall that their idiot heads bumped along the roof of the boulevard-went by singing old synthetic songs in old forgotten keys or clinging to clangerous floats blazoned YOUR JONES! or McDOBIE BRANCH FOREVER! and followed by complicated selfblowing kites, pennons and balloons in the shapes of crucifixes, germs, ancestors, birds, insects, hobbits, automobiles, reprints, guardian angels, clotheslines, codas, dragons, horses, taxes and other mythological monsters.

"Funny, aren't they?" Alva McGee said, behind Jothen's back.

"They scare me, Alva. What are we going to do with all these madmen?"

Jothen, but had nothing more to say for the moment; and Jothen realized suddenly that McGee was as big a puzzle to him as the Joneses. Finding the man assigned to him as an "administrative assistant" for the evacuation of the Joneses had been a surprise, and not entirely a welcome one, particularly after Jothen discovered that McGee's qualifications for the job included the title of Mayor but did not include any special knowledge of the water

system or any of the rest of the fine structure of Gitler.

Even his title was baffling. No city had had a mayor or been otherwise independent of the over-riding ecology and economy of the over-ridden world, for nearly as many centuries as Jothen had fingers. Apparently, the presence of McGee represented only some last-minute notion of Biond Smith's that the stand-by city's crew would need help with their paper work.

It was a notion Jothen somewhat resented, if it was correct. And whatever the answer to this puzzle, Jothen did not judge McGee capable of much help. His specific technical ignorance simply added pedagogy to the press of Jothen's other duties. That much, Jothen could manage to resent from scratch.

"They're not as mad as all that," McGee said equably. "They're noisy, but why not?—they're having a good time. These family conventions are the citizens' one big chance in a lifetime to cut loose and behave almost as anti-socially as they could have every day, back in the Age of Waste."

Jothen groaned inwardly. McGee's occasional fits of history were already a cross to him. "It amazes me that Prime



Center allows them at all—the Conventions, I mean," he said.

"Therapy, my boy, therapy. Besides, they give Transcorp a golden opportunity to process vacationers in blocs of a million or more at once, instead of one at a time. All perfectly rational."

Jothen pointed to the dolls and banners. "Those are rational?"

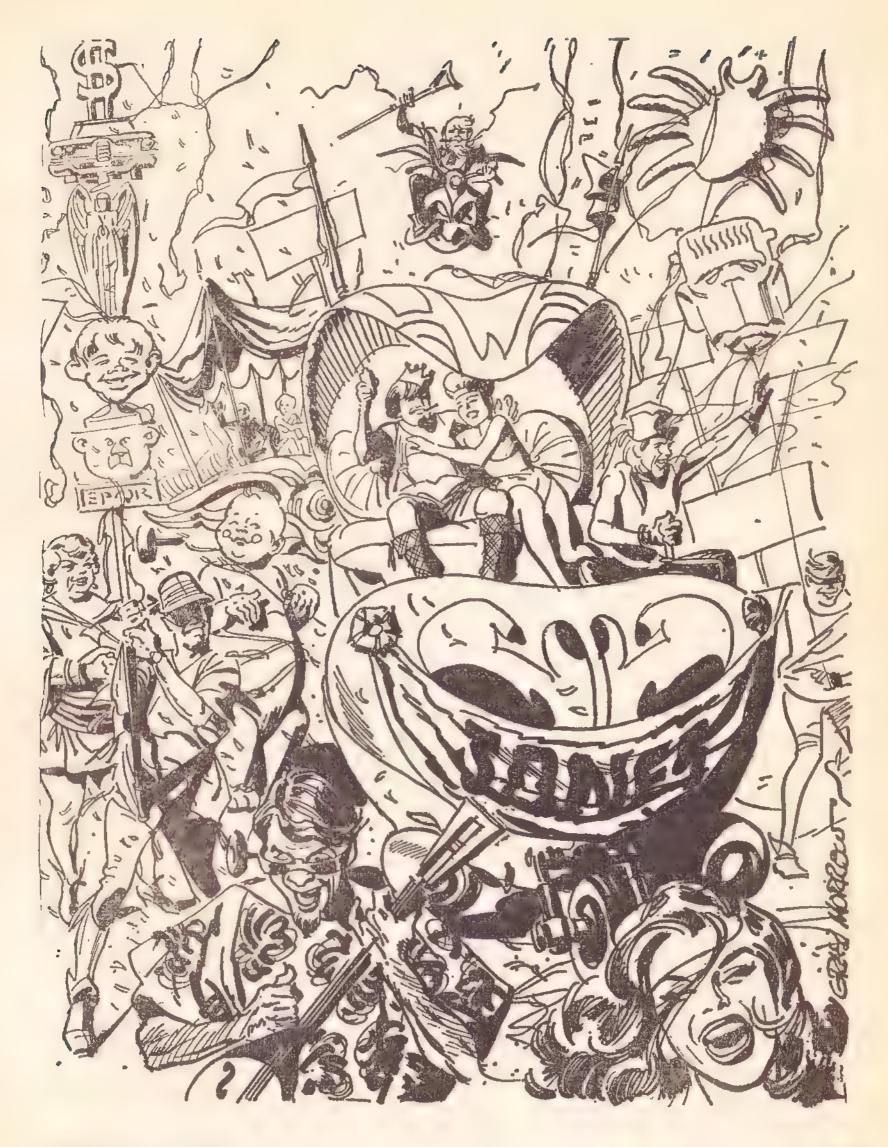
"No, but they're helpful," McGee said, "if you know what to look for. All those things are just rags and tags of quasi-religious traditions—a kind of Jungian-Gravesian substrate, decorated with vague memories of lesser cults. They imply all

sorts of beliefs, not all of them quite extinct: reincarnation, racial memory, ancestor worship, telepathy, historical fatalism, traditional supernaturalism, momism—"

"Whoa!" Jothen said desperately, quite unaware of the totem he was himself calling upon.

"—but the Joneses don't know any of that. Lucky for us; if worse comes to worst, those things give us handles to manipulate them by."

"Good. Go manipulate them, Alva. I've got to check the water, the food, the power supplies from top to bottom and help the rest of the city's oper-



THE PIPER OF DIS 63

ating crew make Gitler ready for occupancy. In the meantime, I want the Joneses gotten out, by any form of transportation you think convenient—the tubes would probably be best, but check Transcorp for advice. If you need any help, you can always call me; I'll be aloft. All clear?"

"As you command, effendi." McGee made an exaggerated bow and started to leave. Then he thought better of it. He said, "Jothen, have you ever heard of a ward-heeler?"

"No. What is it? Another Jones totem?"

"Not precisely. See you later. I won't call unless I have to."

He slipped away, quietly for so tubby and talkative a man. Below, the torrent of faces poured along as noisily as ever. Jothen was relieved to be able to get away from them both.

Nevertheless, maybe McGee was going to have his uses after all. To do him justice, he had already eased Jothen's worries a little, by reminding the harried engineer that some moderately large proportion of the Joneses—perhaps as many as twenty-five percent—probably did not need to be sent home at all. As members of a chiefly North American clan, that many probably lived within the areas due to be affected by the arriv-

al of Flavia; and there would be no sense in shipping them back there. Since their specialties (those of them who were employed) would no longer be needed at home, a lot of them would simply be exported right back to Gitler. It would take a little paper-and computer-work to identify this sub-group; but that was precisely the kind of thing that McGee was supposed to be good at, while the very idea itself had not occurred to Jothen.

It had occurred, however, to one Fongavaro Jones.

II

Why Fongavaro was at the moment hiding in one of the deepest service tunnels of Gitler, feeling like a hunted man. He was not exactly hunted, yet, though he was looking forward to it. Instead, he was stalking a Rest Stop, just for the practice, since again he did not expect that there would be anyone in it. Not yet.

Fongavaro was classified by UNOC as a communications systems specialist and hence, like Jothen, was one of those most fortunate of all citizens, a man with a job. But there the resemblance ended. He looked rather more like an orangutan,

a stocky, muscular man with long arms and large hands. In his native city—Tananarive, in Madagascar — he probably would have attracted no attention; but in these dim, empty corridors he was a startling, perhaps even a fearsome figure.

Of this he was well aware. Moreover, he was counting on it.

If the usual Jones was as crazy as Jothen took them all to be-which was doubtfulthen in this too, Fongavaro was a specialist. A great part of his life had been spent in the labyrinthine service tunnels between the walls and under the floors of Tananarive, and he was thoroughly suited for it; in an earlier age, he might have been a spelunker. Beyond the average UNOC citizen's natural mild case of agoraphobia, he actively enjoyed living at the bottom of a hole. The pleasure had been completely unconscious, simply because, until very recently, nothing had ever suggested any other way of living to him; he had been as adjusted as a mole.

Then had come the journey to the Jones Convention—his first venture outside his own city, his first sight of the whole blue void of the sky, his first projection into nothingness on a jet plane, his first direct encounter with the boundless expanses of the sea and of the World Forest. Until it happened, he had thought of the trip only as a sort of longer, duller version of a tubeways jaunt from one Madagascan village to another. He had of course known that he would have to fly part of the way to Gitler, but he had never dreamed that it would be like that.

He spent the whole air trip falling, falling helplessly out of his chair, desperately nauseated, struggling not to look out the window, feeling stifled and trapped by his harness, fighting against the pills and injections they tried (successfully once or twice) to give him and, above all, raging at how his own body, his own ignorance, his own gullibility, his own manhood had betrayed him.

The ordeal had been terrifying beyond belief—but worse than that, it had been humiliating. . . . totally humiliating. He had no intention of ever facing it again.

The early recall of the Joneses startled him a little, but did not dismay him. He had already known precisely what he was going to do, as soon as he found that there was no official place in Gitler for him (which he had also expected). It was simplicity itself to hole up in

the service tunnels of Gitler, in a sector that had never been occupied by the Joneses or anyone else. The system was not identical with that of Tananarive, but the similarities were close enough for his purposes.

The Rest Stops, here as at home, were located at strategic points throughout the network for the convenience of the maintainence staff, when they were on tours of inspection. Except that they had no windows, the Stops differed little from the average man's apartment: eight rooms with complete living facilities, including autoservers, so that staffmen could remain on tour for days at a time without having to return to the home technie village under the flyport. In a mostly empty stand-by city, no keys to the Stops were needed.

As long as Fongavaro could stay clear of Gitler's own crew, in short, he had it made. He could go underground and stay there.

With the second general announcement, however — that Gitler was soon to be occupied by a still greater horde than the Joneses, this time of refugees—he was less pleased. As was usual procedure every day and around the clock in any working, occupied city, two-and

three-man teams would now be fanning out through the tunnels to check the utilities, and the Rest Stops would be needed. From now on, Fongavaro knew, he would have a tough time remaining undiscovered.

All the same, he was never going to go back to Tananarive—not for Jothen Kent, nor for UNOC, not for White Mother Jones herself. To prevent that, any alternative was thinkable.

The next Rest Stop was before him at the end of the corridor, its closed iris door looking as cozy as the entrance to a burrow. He stopped just around the bend and listened. No, there was nobody inside—the little green telltales showed that — but nevertheless he thought he had heard a movement.

There it was again. Footsteps—one set of them.

Somebody was behind him. The steps were confident, unhurried and not at all furtive. Fongavaro did not think that he was being stalked. It was probably just a service man. But from here on, the corridor was a blind alley.

All right, let him come on. Fongavaro glided silently through the Rest Stop door, which irised shut as silently behind him. The telltale, of course, turned yellow; but that

couldn't be prevented—and besides, the newcomer would probably welcome the idea of company. He was going to get it.

Any alternative was thinkable

Not much more than three million miles away, Biond Smith's spoilage crew toiled clumsily in their vacuum suits, chewing steadily in Flavia's vitals with prolapse drills. They had less than two weeks left to break up the asteroid, before the lasers would focus on her remaining mass and turn her into a lopsided sunlet; but thus far, even with the loss of three lives, they had not succeeded in doing much more to her than spoiling her shape.

An alarm sounded in their helmets, and the drilling stopped. It was time for another blast on the Earthward side of the planetoid. Inevitably, some of the resulting pieces would take off for Earth a good deal faster than Flavia herself was already travelling, but that would just have to be borne, since it would concomitantly slow as well as lighten the main mass.

There was a thudding jar deep in the rock, a soundless flash of yellow light, a slowly spreading cloud of dust in the

eternal sunlight. The men went back to work. Somehow Flavia did not look a single inch smaller to them than she had before.

His honeycomb helmet unaccustomedly heavy on his head and shoulders, Jothen rode up a secondary utility stack toward Gitler's main distribution center. The Joneses, once out of his sight, were also almost out of his mind except en masse, as an abstract complex of technical problems; but those were quite complex enough to suit him. He would let McGee deal with the Joneses as people, as long as possible.

He stopped at the next way station and phoned Piscetti, his chief of operations.

"Everything's normal on the lines," Piscetti reported. "But Jothen, we've had a killing. One of us—Guivrec Krantz."

"My God. Who . . . where—"
"I don't know who. Where, in
Rest Stop BB-596, way down in
the bottom levels, strictly nonresidential and always were. He
was strangled. It looks like he
was taken by surprise, because
there's no sign of a struggle."

"All the rest of our people accounted for, I hope?"

"Yes," Piscetti said. "I checked that right away—none of them has been anywhere near that area in at least a year.

It has to have been one of those crazy Joneses, somehow or other."

"Crazy is the word for it. See what else the computer can give you. The man may have given himself away in some way—a minor arrest, a lost ration-card, some other such bit of business. Anybody who's got a special record of any sort."

"I'll try it," Piscetti's voice said dubiously.

"All right. I'd like to stop him fast if we can. We've got enough trouble as it is. I'm going on up to Distribution, and I'll call you from there."

Nearly in shock—for though Guivrec had not been a close friend, he had known the man casually, and the maintainance crew was jealous of its own—Jothen resumed his ride up the stack. It discharged him at last into the throbbing darkness of the distribution center, its gloom relieved only here and there by the little stars of tell-tales and safelights.

It was not a reassuring place to be under the circumstances, familiar though it was. He felt distinctly uneasy, and his eyes kept darting off into corners. Knotted across the far-away ceiling were the complexes of pipes which tapped shunts from the main overhead supply line. That colossal feeder—so large

in diameter that it could accommodate a six-man personnel capsule and now and then actually did-served chiefly to bring in Gitler's water supply direct from the water table up north, but that was far from all that it carried. It also bore food, fuels, rock slurries and almost every other kind of supplies or semi-processed materials which could be moved in the form of self-contained peristaltic packages. Most of this material either originated with or had been routed through the Municipal Services Center in the Kansas City complex. The pipeline was Gitler's jugular vein.

At the moment, there seemed to be something wrong with the sound that it was making.

Jothen doubted that he ought to be alarmed . . . at least as yet. Though he knew most of its moods as well as a crechemother knows the noises of a nursery, it seemed logical to him that the master conduit might make a sound new to him, when it was approaching peak load - as in preparation for the refugee influx it was now doing for the first time in its history. After all, until the Joneses had arrived, it had effectively just been sitting there since Gitler was built, seventy years ago; the burden of the technie village alone was small.

Still, it was second nature in him, just as it would have been with a creche-mother, to check such matters. Climbing through the dimness to a cat-walk where there was a slave meter-board for the Traffic computer, he called for a read-out on pressures, rates of flow and what kinds of loads Kansas City said it was sending.

he found it impossible to believe what he saw. Maybe it was not, after all, as bad as it seemed. As a last precaution, he asked for a Chicago manifest for the day.

Then he pushed every red button in sight.

The Joneses-all but one of them-heard nothing but the continued bawling of the public address system, directing them to the tubeways and, then, Jothen's voice calling for Mc-Gee. But the work areas, the machinery decks, the utility stacks, the technician's village and homes all jangled and squalled with leather-lunged alarm. After a while, lights on the slave board showed that Jothen's emergency staffmen were coming onto their posts; but it was several minutes more, before the phone rang to bring in McGee's voice.

"What's the matter, Jothen?

Everything's going swimmingly down here—or at least it was until now."

"You may have to swim for it in earnest," Jothen said grimly. "Where are you concentrating your people?"

"At the tubeway stations, just as you suggested."

"Yes, but which ones? The main outgoing depots, in the sub-basement? . . . That's what I was afraid of. The thing is, there's a very good chance that our prime feeder line up here is going to show a major break in about ninety minutes."

"How come? It's hardly ever been used!"

"That's probably the trouble," Jothen said. "Evidently there was a small flaw to begin with, or else it crystalized out during disuse—and I suppose the first strains, after the Joneses came in, made it worse. Anyhow there's a weak patch where a shunt goes off toward the flyport fuel tanks. I still think it's nothing we couldn't handle normally, but Chicago is shipping us a big bolus of pre-melted gallium as a moderator to start our main nuclear pile with, and when that hits that bend-"

"Why didn't your computer show that shipment long ago?" McGee broke in irritably.

"It hasn't come onto the Kansas City block yet; I just picked it up off the dispatcher's waybill from Chicago. Anyhow we'll get nowhere arguing with it; it's on the way."

"All right, but it still seems like a sloppy way to run a pipeline. What do you want me to do?"

"Get everybody up to the roof," Jothen said. "We'll have to evacuate them from the flyport and from the terraces, too. Luckily there's plenty of roof space and no air traffic to speak of."

"Everybody? A million Joneses—in ninety minutes? Miracles aren't my specialty, Jothen."

"We won't have to evacuate them in that time, just get them aloft. You may have ten extra minutes, even after the main breaks. It'll probably be that long before the liquid parts of the load cascade down to you. I'm hoping some of the gallium will solidify fast enough block off some of the semi-hard junk in the pipe, but I can't count on it-its melting point is around eighty-five, and the temperature up here is only fifteen degrees below that right now. Better move fast—and good luck."

"Thanks;" McGee said, with more than a hint of irony.

Jothen cut over to another line.

"Piscetti, Jothen here. Any chance of our moving a nuggetgrade coal hopper into the shunt room in time to catch-? . . . Too bad. Okay, in that event the first thing I want is a fluted baffle over the shunt-room drain, so the gallium won't plug it; check storage for something light enough to truck in here fast. Set it up so that it slants the stuff off into the utility stack . . . Yes, but I'd rather have to chip spray out of the stack than try to free metal chunks from a roomful of frozen valves . . .

"Damn it, I know we ought to drain the aero fuel, but we'll need it up there for the incoming evacuation ferries-and besides, where'd you suggest draining it to? Do you want it stored under a jet of hot gallium? . . . Right. Now-I'm closing the living areas in ten minutes and putting all public stairs and walkways off limits to the crew, to give McGee queue space; we'll use the stacks only. Also, there'll be a gas alarm in thirty minutes for the work areas; whatever that stew from the pipes generates when it mixes, we don' want to breathe it. Got all the ... Timing starts in fifteen seconds . . . Mark."

"Mark," Piscetti said unemotionally, and his light went out. Overhead, the great pipeline gave a premonitory groan. Jothen yanked the power jack out of the slave board, resettled the honeycomb helmet and ran for cover, hoping that the master computer had eavesdropped and understood his timing instructions.

It took him four minutes plus to make the main gallery over-looking the pump hall. Fronted with polarized, laminated glastic, the gallery was theoretically immune to heat shock, and to most mechanical insults. If it wasn't, Jothen would be allowed only a few seconds of life to regret it; he had to stay here until the accident arrived, since the gallery held the only gang board he could have hoped to have reached beforehand.

Pulling down his gas mask, he checked the timing: yes—the computer was clocking both deadlines. The hot line from Kansas City was producing a silent red scream. He snapped it open.

"Gitler, are you aware that a capsule of molten gallium —"

"Yes," Jothen said grimly. "Why didn't you stop it, KC?"

"It had crash priority. What's the matter, can't you handle it?"

"No—but now we've got to try. Get off the line, we've got troubles enough."



"Very well, Gitler. However, please record that we're shunting the river around you as of now."

"What!" Jothen shouted. "Listen, get me a senior monitor up there—this is no time for computer handling. We can't do without the river—"

"This is monitor control."

"But . . . how do we drain off this mess you sent us, then?"

"You'll have to store it," KC said primly.

"Store it in what?"

"Your problem, Gitler. We can't allow you to contaminate the water table downstream. Good luck. Out."

"Out upon you, you—" The KC line went dead.

"Piscetti—Piscetti! . . . Oh, damn . . . Master computer! Give me a radio-active storage deadhead!"

"Radio storage tanks are sealed," Gitler's computer said.

"Open them, and reroute all drainage channels for receipt of sewage."

"No access," the computer said. "Radio storage is under UNOC seal except for emergency dumping of nuclear wastes."

Jothen shut the mike off for a moment and swore. Obviously he could not dump the city's two working power piles; that

would leave the whole of Gitler without electricity. But on the other hand, what choice did he have? He had to get rid of the incoming garbage somehow, and the river was closed to him.

"Dump the technie village pile in — let me see — twelve minutes after the mark. Dump the city's stand-by pile three minutes thereafter, barring a countermanding order from me and nobody else. At eighteen minutes, shunt all city effluent into the radio storage tanks. And give me a rate-of-fill estimate for the tanks, keyed to radiation hazard for personnel in the subbasements."

"Minirads for personnel will be reached in fourteen minutes after the mark," the computer said, with perfect indifference. "Radio storage capacity will fill and reseal at two hours aught two minutes. Subbasements will be uninhabitable for personnel thereafter for approximately twenty-eight thousand, five hundred and thirty-nine years, give or take four years."

"That's no good. Advise Kansas City River Control that we will overflow hot onto the water table after one hour unless they let us spill into the river instead and give them a complete rundown on what isotopes to expect, halflives and all. Don't tell me, tell them. Also, tell Radio-Census

Washingtongrad we're going to have a long-term hot spot underground here, same data. Mark and move on all orders when I switch out."

"Ready to mark," the computer said, almost as disinterestedly as Piscetti.

"All right. Out."

Another call light lit. It was Piscetti back again.

"Hello, Jothen, glad I located you. I've been picking up your program. But I've got something else, too. I think we've identified the murderer."

Jothen was astonished to discover that he had forgotten all about the death of Guivrec. "Who is it?"

"A Madagascan technie named Fongavaro Jones. He tried to join our maintenance staff a day or so after he got here, but Tananarive — that's his home town — wouldn't release him. Then he disappeared, and there have been unexplained small drains on the Rest Spots in the murder area ever since."

"Sounds convincing."

"There's more. The news leaked out somehow, and the rest of the Joneses have been blowing up the rumors in the usual way. The last version I heard was that a homicidal maniac is on the loose with a laser metal-cutter. They say he's already killed and dismembered fifteen people." "I'm not surprised," Jothen said grimly.

"No, but it's still feeding back. Fongavaro evidently has been listening in from one Rest Stop or another, because he now seems to have the idea he can everybody away --frighten maintainence staff included and have the city all to himself. He just tried to broadcast general warning, something very grisly about the Stalker Who Strikes Unseen - wonder what he's been reading lately? Anyhow, the computer intercepted it, compared the voice with the one recorded on the transfer application, and there we were. It's Fongavaro, all right."

"And psychotic for sure. Put a squad after him, but don't risk them unnecessarily — that area's due to be flooded. I'd rather have him just kept below than captured if there's no other alternative."

"Will do. Be sure you get out yourself."

"Right. Out."

A sharp hiss from the shunt room made him jump, but it was only the discharge lock, splitting lengthwise to emit a capsule whose green cocarde said it contained pine-nut flour. It lay quiescent on its receiving truck for a moment like a fat, white worm, its flexible sides

still glistening with the water that had pushed it into Gitler. Then the truck hummed away with it along the tracks toward the community kitchens.

The groan he had heard earlier must have been in response
to the arrival of that load; evidently the crystallized spot in
the main line was in even worse
shape than he had feared. The
discharge lock had already closed, and at the moment the usual
torrent of water was rushing
along the line in its usual silence
— but that wouldn't last.

He glanced at the clocks: only three minutes to go! It seemed impossible that so much time had already passed; yet now that he was watching the tumblers and sweep-hands. they seemed to freeze into immobility. The last sixty seconds were the longest in his life. Was it never going to happen —

Then, with a crack like the snapping of a treebole, the main line split. Water jetted out of it. Under the intense pressure behind it, the jet was as smooth and hard as a sheet of glass; and it shattered like glass when it hit the baffle over the drain. The air in the hall became one solid, terrible shriek. Were it not for the glastic barriers, the sound alone would have killed him.

He looked quickly over his

shoulder to make sure that the one-man lift to the flyport control tower was still standing open and ready. At that instant, the noise stopped. In the aching, intolerable silence, the crack in the main lengthened, and something white came swelling out of it like an obscene balloon — the gallium capsule or a pseudopod of it.

Jothen did not wait for the sequel. He was into the little drum-shaped lift and shooting skyward in six seconds flat.

Beneath him, the computer stolidly continued to watch, filming a miscalculation it could have prevented, had anybody had time to ask it esoteric and unlikely questions about rareearth chemistry. As the hot spray of silvery metal hit the moist air of the shunt room, most of the trivalent stuff converted to the sesquioxide. The air seethed. Spitting like dragon's poison, the oxide flakes struck the baffle. magnesium which was slightly alloyed to prevent burning. As it splashed over the baffle, the dragon's spittle reduced metallic gallium again. promptly and violently.

The explosion shook the top levels of Gitler like a temblor. Jothen's car, the compressed air on which it was riding snatched out from under it, slammed to a stop halfway to the flyport

control tower. Trembling and swearing, Jothen began to climb the rest of the way.

Anyhow, he thought so much

for Fongavaro Jones.

He had never before had so prompt an answer. From somewhere behind him, a shot pierced his temporary deafness and ricocheted, squealing away from the riser three inches from his left foot, leaving a bright weal in the metal.

III

It had been easy enough for Fongavaro to come by the gun. Except for the very small and inexperienced police squad - half of which was already hunting for him - nobody in Gitler went armed, of course; but here, as in Tananarive and in every other city, there was a small cache of sidearms in every fifth Rest Stop, stored there for the technies' use against the possibility of a really major riot. Though he had never fired a gun and expected to continue to prefer strangulation, Fongavaro had appropriated a pistol early on, just in case.

It would probably have been rather more difficult for him to say exactly when he had come to believe that Jothen Kent was the principal agent of all his troubles. In one sense, the reali-

zation had swept over him, when he had listened in on the Gitler official's directions for hunting him down or allowing him to drown. At least, it was then that he had realized that killing Jothen Kent would now be only selfdefense.

But in another sense, it seemed to him that he had always known it. After all, it must have been Kent who had turned down his original petition to be transferred to Gitler's working crew: surely no computer would have been entrusted with an application so important. It was on Kent's order that the Joneses were being evacuated, obviously a transparent maneuver to ship Fongavaro home by force under cover of a fake emergency what sane man would believe that story about a giant meteor? - no matter how many other people's civil rights were violated in the process. And surely it must have been Kent who had cunningly alerted the computer to any possible further message from the fugitive. Fongavaro knew something about computers and had carefully and cleverly worded his warning to get it past any mechanical intelligence that lacked the guidance of a human enemy. But for Kent, it couldn't have failed.

In any event, it was now perfactly clear that Fongavaro could not hope to have Gitler to himself while Jothen Kent was alive. Without Kent the evacuation of the Joneses would fall apart — this McGee, with whom Kent was trying to confuse him, was obviously only some sort of minor politician or other flunky — and the milling hordes would then be easy to panic. In addition, the hounding of Fongavaro himself would stop, deprived of the leadership of the one man who was really out to get him. It all made perfect sense.

Avoiding the patrols and getting out of the subbasements was simple. After all, he could hear every order that Kent issued, even those that didn't seem to bear directly on hunting him down. For the same reason, finding where Kent was working and was planning to go next had been equally easy. Fongavaro worked his way cautiously up the utility stack, stalking the stalker.

The explosion threw him and enraged him. He had not expected Kent to be ready to destroy a part of the city to get him. He was almost as surprised to see his prey erupt from the lift-shaft in mid-air, so to speak, and go on up toward the flyport on foot. But he was determined to let nothing that Kent could do rattle him — nothing!

Regaining his footing, he pointed the gun.

Of course, he missed and nearly lost hold of the little automatic, to boot. But it did not look like he had missed by much. He took aim again, this time using both hands.

"Fongavaro!"

That was Kent's voice, echoing down the stack. It was bound to be a trick.

"Fongavaro! Cut it out, man! Don't you want to get out of this alive?"

"I'm not getting out," Fongavaro said — to his own surprise, for he had not meant to answer at all. "You can't scare me away —"

"Then you're being a damn fool. The main feeder line's broken, and the city's flooding. Throw away the gun and come on aloft with me. I'll help you if I can. There are planes up there, waiting to take you all home."

At the word "planes," the whole of the stack washed out into a red blur, and Fongavaro's ears roared with the pulsing of his own blood. Through the pounding confusion, he heard the gun go off . . . but when he could see again, Jothen Kent had vanished.

The providential emergency exit debouched Jothen into a section of the city with which he was unfamilar — and worse,

it was empty. It appeared to be a residential area, perhaps the topmost one under the technic village. The air of the street was full of settling dust, which confused him further, since he had never seen such a thing before. He could only guess that it was some aftermath of the explosion and was glad his gas mask was in place.

There was of course no way to lock the emergency exit, and he wasted no time seeking ways to jam or block it. His only impulse was to run. He did not like being shot at.

But run to where? In the distance, he heard a compound rumble of many voices, some of them shouting. That might just be the sound of a column of Joneses, being led up motorstairs toward the roof. If so, there might be one or two of his own men there who would be armed; or at worst, he ought to be able to lose himself in the crowd. Panting, he took off.

There was a blurred yell, hardly human, behind him and then another shot. How many rounds did that gun have in it, anyhow? He remembered, not too certainly, that the standard automatic was a high-velocity weapon that bit tiny splinters of lead azide off the end of a roll of plastic-fill tape; if Fongavaro had one of those, it was good

for a least a hundred tries at Jothen before even a dub at guns would have to try to reload it or throw it away. Jothen promptly tried to run faster, but short of free flight he was already making better time than he would have thought possible before.

He careened around a circle of silently watching coupon shops, all as empty of merchandise as they were of people, and slowed down at the main entrance to another utility stack. It was sealed — by his own order. But the crowd noise now seemed quite close. Cutting down a deserted avenue, he found himself charging now into an exchange plaza.

His heart gave a bound of hope. The plaza was full of pushing, flushed, scared figures in torn costumes — some carrying or tugging at quarreling or squalling children, others dragging baggage they had never had to tote before, still others finding it difficult to shuffle their own two feet. From the midst of the mob, two broad spiral escalators, twined around each other like twinned genes, wound upward through the remote roof, packet with restive Joneses.

He tried to work his way through them and was indignantly shoved back at, until the people around him took second looks at him and saw the honeycomb helmet. Then they gave way, but slowly and sullenly. The Gitler crew was not, it was painfully clear, very popular around here at the moment.

Slow though his progress was, Jothen should have been pleased with it, for he was surely quite buried in this mass of flesh now. But instead he felt stifled, he himself on the verge of panic. Sweating, he went on shouldering his way forward, trying to pull through the gas mask thick, wet air that had no odor but completely refused to move into his lungs.

The helmet jolted suddenly on his head and shoulders as he jammed himself onto the nearest escalator: somebody had tried to punch him where it usually counted. Then he was on the stairs and being swung up and up, around and around, and the plaza was fading into a lake of bent heads and angry upturned faces. Breathing a long sigh of relief, he looked back at the boulevard by which he had come galloping into this press.

I ongavaro was standing there, the street empty behind him, his monkey body and ragged filth marking him off from the other costumes almost as readily as the neat, viscious little gun in his hand. Jothen felt an

impulse to thumb his nose; but at the same moment, the foreshortened Madagascar raised the pistol at the end of both long arms and fired it squarely at Jothen's head. How could he tell which of all these stair-riders—

The helmet! Even among all these unintelligibly costumed people, there could be no mistaking that bulging, functional carapace; it said Gitler to all the Joneses, and Jothen to Fongavaro, like a scarlet tattoo. And Jothen did not dare take it off, even if the spiral swath of bodies around him had left any cranny in which to hide it; it was now his only contact with Piscetti, with McGee, with the crew, with the world-at-large.

Where the hell was the armed squad? How long was this damned go-around motor-stair ride going to take? How far up—

Splat!

The sound of the automatic was only a stitch in the fabric of the crowd's noise, but Jothen—and probably Jothen alone—could hear it all to well. He flinched helplessly inside the honeycomb, feeling as though the whole front of his helmeted head was one enormous target.

But Fongavaro, amazingly, did not seem to think he was getting anywhere at all. Jamming the still-potent gun somewhere inside his rags, he scuttled almost on his knuckles along the fringes of the mob until he came upon a fat and fussy old Jones in a Pierrot suit who seemed to be trying to load his life's possessions into a battered but still floating autocrutch. Dumping the oldster and the luggage with a single brutal sweep of his forearms, Fongavaro straddled the machine and scooted in a long, wabbly parabola toward the top of the motor-stair tree.

The hole in the ceiling swallowed Jothen, before he saw the end of that crazy ride. He was just as glad, but he knew better now than to draw any deep breaths; he was still on the run.

The next level was the floor of the technie village, quiet and bucolic and familiar ordinarily. Now it was a shambles. The overflow Joneses - out of sight and hence out of mind of Gitler's few and tentative police - were making up for the loss of their totems and baggage by looting the technie's homes. There was nobody around to prevent them or even to herd them back toward the roof; they were spreading out all through the level, giggling, singing and throwing bottles at each other. Fuming with indignation, Jothen threw a leg over the stairs to get back down to the floor; somebody had to break up this orgy -

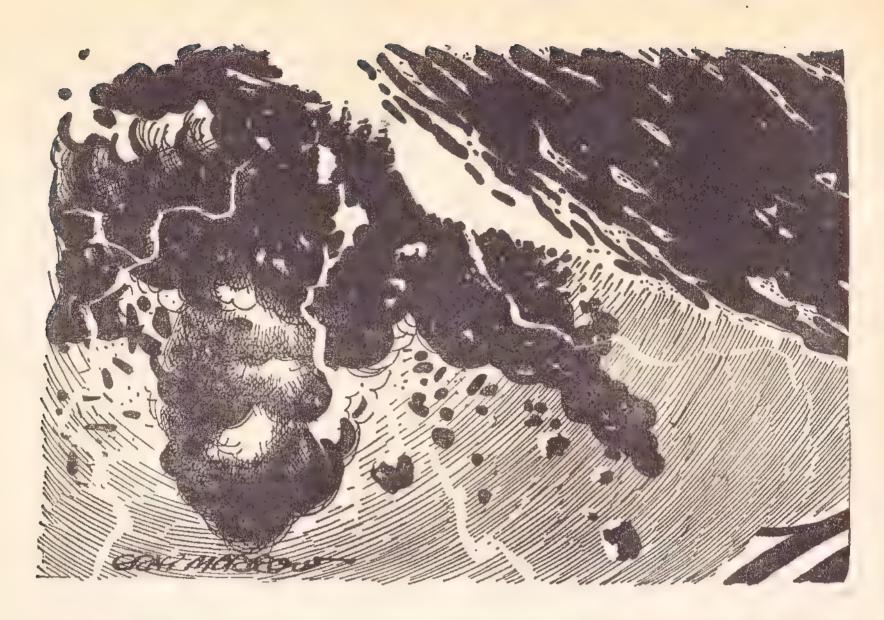
Splat!

Another poisonous, explosive little bullet flew by his helmet and drove him back to his main interest: flight. Casting frantically about for the shot's source, Jothen saw Fongavaro rowelling his autocrutch, riding tail-up and sidewise, out of the mouth of a ventilator shaft about half a mile away. The Madagascan's expression was unreadable at this distance, but his whole posture telegraphed black murder in any language.

There had to be some way out of this cul-de-sac. It was ridiculous that Fongavaro should be able to make better time through the pores and doors of Gitler than Jothen himself could. The technies' access shaft to the flyport control tower had to be on this level. If only he could bull his way off these damn stairs—

Like a scuba diver, Jothen rolled over the moving handrail of the stairs and dropped to the floor of the village. Fongavaro banked around the stairs and swooped down over the heads of his scampering cousins; but he was having a hard time with the lurching autocrutch, which had not been designed for aerobatics. He overshot Jothen so fast that he nearly rammed into the far side of the square.

While he was still fighting to regain control of his clumsy me-



tal broomstick, more than half of the lights dimmed and went out, to a groan of dismay from the Joneses. The computer, restricted now to battery power, was economizing.

The sudden gloom was just what Jothen needed. By the time Fongavaro was in condition to look for his quarry again, Jothen was already in the lift.

IV

"Has anybody got a gun?"

In the control tower, heads turned blindly toward Jothen, with the tense impatience of men distracted from serious work by nonsense. Then one of the crew recognized him.

"I think there are some signal pistols up here, Mr. Kent. If they're still operative. We don't expect to need them."

"Won't do. I mean a gun I can kill somebody with."

"Kill somebody — ? No, sir, nothing of that sort?" the tower man said stiffly, and went back to work. Only one other operator had been listening to the brief exchange with less than half of his attention. His expression clearly showed that he thought he had probably missed a key word somewhere.

Jothen sighed and looked out over the flyport. From here he



could see no trace of the explosion, unless he counted a small but rapidly rising column of white smoke from a ventilator head about a mile away. The rest was silence. Beginning right at the edge of the flyport, the Monterrey pines, hybrid poplars, bamboo and giant sugar-cane --the food of the world - covered the whole of Gitler, marching solemnly down the terraces and Chinese walls and joining the rest of the World Forest so smoothly that the city's edges were impossible to define from the air. From here, the world was in a pastoral sleep.

Overhead, the autumn dusk was deepening, soft and clear.

There was no moon, but already the night gave promise of a blaze of stars with, of course, no sky-glare to mock them. Among one constellation's scatter of suns — he could not tell which — Jothen could make out several distant moving lights: probably the first planes of the ferry fleet. Transcorp had moved fast, as usual.

Evidently McGee had also moved fast. A growing murmur of many voices, like a distant sea, told Jothen that a surf of Joneses was already out on the roof of that city. He could see several amoeboid batches of them, dim and sad in their drooping finery, clumping together like

slime-molds on the flyport's staging apron; but most of them were invisible, masked by the trees. That accounted in part for the uneasy edge to the susurrus. Ordinarily, nobody was allowed in the World Forest but Rangers and repairmen of the Pipeline Corps, and the Joneses doubtless were finding the open air and the towering silent woods disquieting.

"Let's stick together, friends and clansmen!" McGee's voice bellowed suddenly. He was using a bullhorn, but even so his voice was tinny with the distance. "Don't wander, don't wander! There's grandfathers in them trees! Stay by the flyport — don't get left behind!"

"Up your Jones!" a much tinier voice shouted. A ragged chorus returned the cheer.

"That's it! Up Joneses! Stay close!"

McGee seemed to be managing—so far, so good. But what had happened to Fongavaro? And why was it so dark? The Joneses should find it easier to stick close to the flyport if they could see its lights, but those were steadily going out. Even the beacons were mostly dead. Jothen pulled his cheek-mike into place to reassume direction of his city and found that that, too, was dead.

The computer's economy measures were becoming drastic. It

could not be faulted for that; battery power does not last very long. But the power failure was damn dangerous and would complicate the evacuation; even if the motorstairs continued to work, for instance, the ferries would have to land blind, by PPI radar.

And no wonder McGee was using a bullhorn instead of the public address system. The man was resourceful, that had to be granted.

It got slowly darker, despite the emerging stars. The Forest whimpered, as if remembering the ghosts of long-extinct ani-Underfoot, something mals. thumped - a secondary explosion? - and the murmuring of the Joneses grew louder. They were already confused by the conflicting orders, angry at having had their fun cut off and probably still making everything worse with the undertow of rumor. And now, also, they were becoming afraid of the strange noises and the deepening night.

Something like a bat — or what Jothen imagined might be like a bat — swooped suddenly in front of his face. It took him a moment to realize that the thing was actually some distance away; and then, that it was Fongavaro on his autocrutch. He was flying very badly. That was not surpris-

ing, for the fan-driven prosthetic machines had never been designed for the open air; but the wild way he was lurching around the sky could not be entirely the fault of the crutch. He was fighting not only the machine, but himself: terror fugatis.

Jothen looked away. There was nothing he could do now; he had gone as far as he could go. He switched his headset to the emergency channel; it responded with a gratifying hum.

It would not have surprised him had the putative Mayor never heard of the emergency channel; but McGee responded at once.

"Hello, Jothen — where the hell have you been? Never mind, noisy down here. Have to talk to you later."

"Hold on --"

"McGee?"

"Sorry. Got my hands full of Joneses. Are the ferries coming?"

"Yes, on the way. Are you —"
"Good. Hold fast. Out."

While Jothen spluttered, the bullhorn began to sound again. Torches began to light, too, some of them among the trees. "Fire in the Forest?" Jothen bawled into his cheek-mike, but there was no answer.

More Joneses poured out onto the flyport and into the woods. The tower deck rumbled under Jothen's feet. Then, there was light.

First the tops of the trees turned silvery. Then, on the roofs, the blackness became stippled with tiler's dots, as hundreds of thousands of white faces turned skyward. A long moan rolled through the Joneses like a comber. Jothen too looked up.

A falling star, so immense that it might have been a falling sun, was streaking with preternatural slowness over the city, lighting the whole landscape with a garish blue-white glare. The side of a nearby ferry, just settling in for a landing, gleamed in the glow as though a searchlight were playing upon it.

The light seemed to be what Fogavaro had been waiting for. Either he had dropped the gun or had forgotten it in his fear of the open sky and the mechanical besom he was a-stride of. Instead, he swerved toward the immobile giant of the control tower and came bulleting directly at the broad windows.

The noise of the meteor's passage had already reached the ground, a loud rumbling like the thunder of distance artillery. Cries of awe and fright rose from the Forest to meet it. For a wild instant, Jothen wondered if this were the monster Flavia herself, ahead of schedule and far too far to the south; but in the same second he realized that it was

probably only one of the fragments Biond Smith's crew had chipped off the asteroid—a small one, probably no more than a hundred tons.

Two thirds of the way across the sky, the meteor exploded, blindingly. Fiery streaks rayed away, nearly to the horizon. Fongavaro, almost close enough now for Jothen to see his features, jerked his craft upward, half-rolled, and ran side-on into a descending ferry.

The ferry, only dented, lurched and righted itself, but the autocrutch disintegrated. Its bright fragments and the sprawling black figure of Fongavaro Jones rained down from Heaven together toward Chaos and Dis, in a blast of sound from the exploded bolide that made the explosion in the shunt room seem like it had been only a warning slap.

Fongavaro's long nightmare of falling had come true and now was ended.

The cries of the Joneses grew louder, edged with hysteria. On the flyport apron, a woman's voice was screaming, "The end of the world! Grandfather is fallen! The end of the world!"

Jothen, shaking, tried again to call McGee and then Piscetti; but if either replied, their voices were drowned out in an enormous waterfall that seemed to have gotten started in his earphones. When he got his sight back, he saw why: the passage of the meteor had left a broad trail of glowing white vapor stretched across the sky like an infernal rainbow. The ionized wake had completely wiped out radio reception, probably all across the spectrum.

Below, the torches began to swirl. The crowd noise was rising to a roar. The dented ferry, rocking on its fans, was settling to the apron, and another was coming in.

Too late, Jothen thought numbly. They're going to panic.

And there was exactly nothing that he could do about it, even had he had any idea of how to proceed. The shadowy figures of the tower stand-by crew, mustered to replace the out-of-action computer, were already bustling in the gloom around him, ready to assist the ferry landings the moment radio contact should be established—or perhaps they were using FM and had never lost contact in the first place. He would have to give them whatever helping hand he could—

Another meteor bloomed in the night sky, rumbling like a thunderhead. It was not as big as the first, but the Joneses were by now in no mood to be discriminating.

Then Jothen heard McGee's voice cutting across the din, his bullhorn turned up to full amplification — a gargantuan bellow that must have been audible even in the still airborne ferries. Astonishingly, the Mayor was singing. Had he gone mad too?

Raise the totems, Gott soll Hueten,

Fa-la-la-de-rol and cordon bleu!

Jericho immune to tootin',

Mighty Mothe, we love you!
Or so Jothen heard it — surely these couldn't really be the words. But the Joneses seemed to recognize them: a family hymn? Scattered voices took up the song, and then, many more.

"That's it, Joneses! All together now!"

The second meteor blew up. Under the light and noise, and that of the ferries' fans, the singing became defiantly louder.

Hubbard's husband, Hubba's wife,

Smith's disaster, Brown's dismay,

Gward of Uncle UNOC's life, Faithful shepherd, A-OK!

Jothen heard himself emit a nervous giggle and suppressed it angrily. Dammit, that surely wasn't how the words went! He tried to pay attention to something that mattered. Six or seven ferries were on the ground now, and Joneses were pouring out of

The time is NOW!

Immortality is within your grasp. The Cryonics Society of New York Inc. is the leading non-profit organization in the field of cryogenic interment. This involves freezing people immediately after death, in the hope of restoring them to full life, health, and youth sometime in the future. We have a practical program of action, which enables the individual to commit himself to this idea in a meaningful fashion. For detailed information write - Cryonics Society of New York, Inc., 2083 Creston Avenue, Bx. New York 10453.

the Forest toward them, led by a tiny, frenetically waving figure. McGee seemed to be leading some kind of a snake dance onto the tarmac.

A third and a fourth meteor arched across the sky together, roaring. The crowd howled back its challenge. The first ferry was loaded and taking off again. Near several of the others, Joneses about to board were ceremonially snuffing out torches in upended metal drums that seemed to have materialized by magic for just this purpose.

Another ferry buzzed off, then another.

"All right, neighbors! Everybody now! Hit it!" The piper's charges raised their voices in a deafening chorus. Nothing else in the world could have been heard above such a choir, not even a major earthquake—by now there must have been nearly half a million people involved, spread out all over the roofs; it was as though Hell itself were singing. Distance muddled the hymn into a shapeless, tuneless thunder, but Jothen could still hear McGee:

Con Ed cons us, UNOC bombs us,

Devils hearstle at our bones—
Still the jolly heartside chorus:
Love us all, and up your
Jones!

The sky was full of planes. And then, suddenly, the flyport lights went on. Whether or not Piscetti had gotten the floods under control, the master computer had reached the end of its allotted clock-time and had restored power to the city.

The evacuation of the Jones Convention would keep right on going, for many days — but the crisis was over. Useless, tubby McGee had piped his rats aboard.

the time he had gotten back to his office, but he could not honestly have described himself as unshaken. He was glad — God knew — that it was all essentially

over, but there were still major questions that he could not begin to answer for himself. He sat down at his disordered console and thought about them conscientiously, but not to much purpose.

He still had no notion of how he was going to cope — both practically and emotionally — with the Chicago influx, after having spent most of his adult life virtually alone in so heavily populated a world. He had not done very well this time; indeed, he had damn near gotten himself killed, and the city was in terrible shape. He felt both incompetent and oppressed.

It seemed that there was no such thing as a single crisis. Every one was a fall of dominoes. It took a lot of footwork just to stay abreast of them.

He noticed with a start that the line to Prime Center was blinking at him. Numbly, he opened it.

"Jothen?" Biond Smith's voice said.

"Here. Hullo, Biond."

"How did it go? KC tells me you're having a terrible scramble. Did you get the Joneses moving?"

"They're on their way," Jothen said. He was surprised to hear that Biond, too, sounded oppressed. Evidently World Directors also had their troubles.

"Good. Was McGee of any use? He's fairly good with paper, I've found."

"He was invaluable," Jothen said. "Especially during the meteor shower."

"Meteor shower?" Biond said, his voice cracking slightly. "Did those fragments come down as far south as Gitler? Obviously they did. Damn, somebody's miscalculated; I'll have to get on that. And now we get to the meat of the matter—Flavia, and the real evacuations. You'd better keep McGee there, as long as he was helpful. He doesn't know a dyne

from a dinosaur, of course, but all the same these ward-heeler types have their uses. I'm one myself. Glad you're all right, Jothen. Bye."

The line went dead.

Taking a deep breath, Jothen set his face and his soul in order and went out to meet his world—or his doom. Maybe by now there wasn't any difference.

But somehow he felt that he would be more on top of things, if only he could figure out what a "ward-heeler" was.

— JAMES BLISH and NORMAN L. KNIGHT

The Award-Winning Author of A Case of

Conscience Spins a Thrilling New Story!

THE HOUR BEFORE EARTHRISE

A trip to Mars in a tree-housel

by JAMES BLISH

THE FOUNDLING STARS

by Hal Clement
(author of Ice World, Mission of Gravity, etc.)

PEACE CORPS

A Complete Short Novel by Robert Moore Williams

All these and many more in the August IF, on sale now. Don't miss it!

AMONG THE HAIRY EARTHMEN

by R. A. LAFFERTY

The Children went to Earth. They played some childish games — and the Earthmen called them History!

There is one period of our World History that has aspects so different from anything that went before and after that we can only gaze back on those several hundred years and ask:

"Was that ourselves who behaved so?"

Well, no, as a matter of fact, it wasn't. It was beings of another sort who visited us briefly and who acted so gloriously and abominably.

This is the way it was:

The Children had a Long Afternoon free. They could go to any of a dozen wonderful places, but they were already in one.

Seven of them—full to the craw of wonderful places—decided to go to Eretz.

"Children are attracted to the oddest and most shambling things," said the Mothers. "Why should they want to go to Eretz?"

"Let them go," said the Fathers. "Let them see—before they be gone—one of the few simple peoples left. We ourselves have become a contrived and compromized people. Let the Children be children for half a day."

Eretz was the Planet of the Offense, and therefore it was to be (perhaps it recently had been) the Planet of the Restitution also. But in no other way

was it distinguished. The Children had received the tradition of Eretz as children receive all traditions—like lightning.

Hobble, Michael Goodgrind, Ralpha, Lonnie, Laurie, Bea and Joan they called themselves as they came down on Eretz—for these were their idea of Eretzi names. But they could have as many names as they wished in their games.

An anomalous intrusion of great heat and force! The rocks ran like water where they came down, and there was formed a scarp-pebble enclave.

It was all shanty country and shanty towns on Eretz—clumsy hills, badly done plains and piedmonts, ragged fields, uncleansed rivers, whole weedpatches of provinces—not at all like Home. And the Towns! Firenze, Praha, Venezia, Londra, Colonia, Gant, Roma—why, they were nothing but towns made out of stone and wood! And these were the greatest of the towns of Eretz, not the meanest.

The Children exploded into action. Like children of the less transcendent races running wild on an ocean beach for an afternoon, they ran wild over continents. They scattered. And they took whatever forms first came into their minds.

Hobble—dark and smoldering like crippled Vulcan.

Michael Goodgrind—a brokennosed bull of a man. How they all howled when he invented that first form!

Ralpha—like young Mercury. And Lonnie—a tall giant with a golden beard.

Laurie was fire, Bea was light, Joan was moon-darkness.

But in these, or in any other forms they took, you'd always know that they were cousins or brethren.

I onnie went pure Gothic. He had come onto it at the tail end of the thing and he fell in love with it.

"I am the Emperor!" he told the people like giant thunder. He pushed the Emperor Wenceslas off the throne and became Emperor.

"I am the true son of Charles, and you had thought me dead," he told the people. "I am Sigismund." Sigismund was really dead, but Lonnie became Sigismund and reigned, taking the wife and all the castles of Wenceslas. He grabbed off gangling old forts and mountain-rooks and raised howling Eretzi armies to make war. He made new castles. He loved the tall sweeping things and raised them to a new height. Have you never wondered that the last of those castles-in the late afternoon of the Gothicwere the tallest and oddest?

One day the deposed Wenceslas came back, and he was possessed of a new power.

"Now we will see who is the real Emperor!" the new Wences-las cried like a rising storm.

They clashed their two forces and broke down each other's bridges and towns and stole the high ladies from each other's strongholds. They wrestled like boys. But they wrestled with a continent.

Lonnie (who was Sigismund) learned that the Wenceslas he battled was Michael Goodgrind wearing a contrived Emperor body. So they fought harder.

There came a new man out of an old royal line.

"I am Jobst," the new man cried. "I will show you two princelings who is the real Emperor!"

He fought the two of them with overwhelming verve. He raised fast-striking Eretzi armies, and used tricks that only a young Mercury would know. He was Ralpha, entering the game as the third Emperor. But the two combined against him and broke him at Constance.

They smashed Germany and France and Italy like a clutch of eggs. Never had there been such spirited conflict. The Eretzi were amazed by it all, but they were swept into it; it was the Eretzi who made up the armies.

Even today the Eretzi or Earthers haven't the details of it right in their histories. When the King of Aragon, for an example, mixed into it, they treated him as a separate person. They did not know that Michael Goodgrind was often the King of Aragon, just as Lonnie was often the Duke of Flanders. But, played for itself, the Emperor game would be quite a limited one. Too limited for the children.

The girls played their own roles. Laurie claimed to be thirteen different queens. She was consort of all three Emperors in every one of their guises, and she also dabbled with the Eretzi. She was the wanton of the group.

Bea liked the Grande Dame part and the Lady Bountiful bit. She was very good on Great Renunciations. In her different characters, she beat paths from thrones to nunneries and back again; and she is now known as five different saints. Every time you turn to the Common of the Mass of Holy Women who are Neither Virgins nor Martyrs, you are likely to meet her.

And Joan was the dreamer who may have enjoyed the Afternoon more than any of them.

Laurie made up a melodrama
—Lucrezia Borgia and the Poison
Ring. There is an advantage in

doing these little melodramas on Eretzi. You can have as many characters as you wish—they come free. You can have them act as extravagantly as you desire—who is there to object to it? Lucrezia was very well done, as children's burlesques go, and the bodies were strewn from Napoli to Vienne. The Eretzi play with great eagerness any convincing part offered them, and they go to their deaths quite willingly if the part calls for it.

Lonnie made one up called The Pawn-Broker and the Pope. It was in the grand manner, all about the Medici family, and had some very funny episodes in the fourth act. Lonnie, who was vain of his acting ability, played Medici parts in five succeeding generations. The drama left more corpses than did the Lucrezia piece, but the killings weren't so sudden or showy; the girls had a better touch at the bloody stuff.

Ralpha did a Think Piece called One, Two, Three—Infinity. In its presentation he put all the rest of the Children to roast grandly in Hell; he filled up Purgatory with Eretzi-type people—the dullards; and for the Paradise he did a burlesque of Home. The Eretzi use a cropped version of Ralpha's piece and call it the Divine Comedy, leaving out a lot of fun.

Bea did a poetic one named the Witches' Bonfire. All the Children spent many a happy evening with that one, and they burnt twenty thousand witches. There was something satisfying about those Eretzi autumnal twilights with the scarlet sky and the frosty fields and the kine lowing in the meadows and the evening smell of witches burning. Bea's was really a pastoral piece.

All the Children ranged far except Hobble. Hobble (who was Vulcan) played with his sick toys. He played at Ateliers and Smithies, at Furnaces and Carousels. And often the other Children came and watched his work, and joined in for a while.

They played with the glass from the furnaces. They made gold-toned goblets, iridescent glass poems, figured spheres, goblin pitchers, glass music boxes, gargoyle heads, dragon chargers, princess salieras, figurines of lovers. So many things to make of glass! To make, and to smash when made!

But some of the things they exchanged as gifts instead of smashing them—glass birds and horses, fortune-telling globes that showed changing people and scenes within, tuned chiming balls that rang like bells, glass cats that sparked when stroked,

wolves and bears, witches that flew.

The Eretzi found some of these things that the Children discarded. They studied them and imitated them.

And again, in the interludes of their other games, the Children came back to Hobble's shops where he sometimes worked with looms. They made costumes of wool and linen and silk. They made trains and cloaks and mantles, all the things for their grand masquerades. They fabricated tapestries and rugs and wove in all sorts of scenes: vistas of Home and of Eretz, people and peacocks, fish and cranes, dingles and dromedaries, larks and lovers. They set their creations in the strange ragged scenery of Eretz and in the rich contrived gardens of Home. A spark went from the Children to their weaving so that none could tell where they left off and their creations began.

Then they left poor Hobble and went on to their more vital games.

There were seven of them (six, not counting the backward Hobblé), but they seemed a thousand. They built themselves Castles in Spain and Gardes in Languedoc. The girls played always at Intrigue, for the high pleasure of it, and to give a caus-

us for the wars. And the wars were the things that the boys seldom tired of. It is fun to play at armies with live warriors; and the Eretzi were live . . . in a sense.

The Eretzi had had wars and armies and sieges long before this, but they had been aimless things. Oh, this was one field where the Eretzi needed the Children. Consider the battles that the Children engineered that afternoon:

Gallipoli—how they managed the ships in that one! The Fathers could not have maneuvered more intricately in their fourdimension chess at Home.

Adrianople, Kunovitza, Dibra, Varna, Hexamilion! It's fun just to call out the bloody names of battles.

Constantinople! That was the one where they first used the big cannon. But who cast the big cannon for the Turks there? In their histories the Eretzi say that it was a man named Orban or Urban, and that he was Dacian, or he was Hungarian, or he was Danish. How many places did you tell them that you came from, Michael Goodgrind?

Belgrad, Trebizond, Morat, Blackheath, Napoli, Dornach!

Cupua and Taranto—Ralpha's armies beat Michael's at both of those.

Carignola-Lonnie foxed both

Michael and Ralpha there, and nearly foxed himself. (You didn't intend it all that way, Lonnie. It was seven-cornered luck and you know it!)

Garigliano where the sea was red with blood and the ships were like broken twigs on the water!

Brescia! Ravenna! Who would have believed that such things could be done with a device known as Spanish infantry?

Villalar, Milan, Pavia! Best of all, the sack of Rome! There was a dozen different games blended into that one. The Eretzi discovered new emotions in themselves there—a deeper depravity and a higher heroism.

Siege of Florence! That one called out the Children's every trick. A wonderfully well played game!

Turin, San Quentin, Moncontour, Mookerhide!

Lepanto! The great sea-siege where the castled ships broke asunder and the tall Turk Ochiali Pasha perished with all his fleet and was drowned forever. But it wasn't so forever as you might suppose, for he was Michael Goodgrind who had more bodies than one. The fish still remember Lepanto. Never had there been such feastings.

Alcazar-Quivar! That was the last of the excellent ones — the end of the litany. The Children

left off the game. They remembered (but conveniently, and after they had worn out the fun of it) that they were forbidden to play Warfare with live soldiers. The Eretzi, left to themselves again, once more conducted their battles as dull and uninspired affairs.

You can put it to a test, now, tonight. Study the conflicts of the earlier times, of this high period, and of the time the followed. You will see the difference. For a short two or three centuries you will find really well contrived battles. And before and after there is only ineptitude.

Often the Children played at Jealousies and raised up all the black passions in themselves. They played at Immoralities, for there is an abiding evil in all children.

Maskings and water-carnivals and balls, and forever the emotional intrigue!

Ralpha walked down a valley, playing a lute and wearing the body of somebody else. He luted the birds out of the trees and worked a charm on the whole countryside.

An old crone followed him and called, "Love me when I'm old."

"Sempremai, tuttavia," sang Ralpha in Eretzi or Earthian. "For Ever, For Always."

A small girl followed and

called, "Love me when I'm young."

"Forever, for always," sang Ralpha.

The weirdest witch in the world followed him and called, "Love me when I'm ugly."

"For always, forever," sang Ralpha, and pulled her down on the grass. He knew that all the creatures had been Laurie playing Bodies.

But a peculiar thing happened: the prelude became more important than the play. Ralph fell in love with his own song, and forgot Laurie who had inspired it. He made all manner of music and poem—aubade, madrigal, chanson; and he topped it off with one hundred sonnets. He made them in Eretzi words, Italy words, Languedoc words, and they were excellent. And the Eretzi still copy them.

Ralpha discovered there that poetry and song are Passion Deferred. But Laurie would rather have deferred the song. She was long gone away and taking up with others before Ralpha had finished singing his love for her, but he never noticed that she had left him. After Hobble, Ralpha was the most peculiar of them all.

In the meanwhile, Michael Goodgrind invented another game of Bodies. He made them

of marble—an Eretzi limestone that cuts easily without faulting. And he painted them on canvas. He made the People of Home, and the Eretzi. He said that he would make angels.

"But you cannot make angels," said Joan.

"We know that," said Michael, "but do the Eretzi know that I cannot? I will make angels for the Eretzi."

He made them grotesque, like chicken men, like bird men, with an impossible duplication of humeral function. And the Children laughed at the carven jokes.

But Michael had sudden inspiration. He touched his creations up and added an element of nobility. So an iconography was born.

All the Children did it then, and they carried it into other mediums. They made the Eretzi, and they made themselves. You can still see their deep features on some of those statues, that family look that was on them no matter what faces they wore or copied.

Bronze is fun! Bronze horses are the best. Big bronze doors can be an orgy of delight, or bronze bells whose shape is their tone.

The Children went to larger things. They played at Realms and Constitutions, and Banks and Ships and Provinces. Then they came down to smaller things again and played at Books, for Hobble had just invented the printing thing.

Of them all, Hobble had the least imagination. He didn't range wide like the others. He didn't outrage the Eretzi. He spent all his time with his sick toys as though he were a child of much younger years.

The only new body he acquired was another one just like his own. Even this he didn't acquire as did the other Children theirs. He made it laboriously in his shop, and animated it. Hobble and the Hobble Creature worked together thereafter, and you could not tell them apart. One was as dull and laboring as the other.

The Eretzi had no effect what-soever on the Children, but the Children had great effect on the Eretzi. The Children had the faculty of making whatever little things they needed or wanted, and the Eretzi began to copy them. In this manner the Eretzi came onto many tools, processes, devices and arts that they had never known before. Out of ten thousand, there were these:

The Astrolabe, Equatorium, Quadrant, Lathes and Traversing Tools, Ball-Bearings, Gudgeons, Gig-Mills, Barometers, Range-Finders, Cantilever Con-

struction, Machine-Saws, Screw-Jacks, Hammer-Forges and Drop-Forges, Printing, Steel that was more than puddled Iron. Logarithms, Hydraulic Rams. Screw-Dies, Spanner-Wrenches, Flux-Solder, Telescopes, Microscopes, Mortising Machines. Wire-Drawing, Stanches (Navigation-Locks), Gear Trains, Paper Making, Magnetic Compass and Wind-Rhumb, Portulan Charts and Projection Maps, Pinnule-Sights, Spirit-Levels, Fine Micrometers, Porcelain, Fire-Lock Guns, Music Notation and Music Printing, Complex Pulleys and Snatch-Blocks, the Seed-Drill, Playing Cards (the Children's masquerade faces may still be seen on them), Tobacco, the Violin, Whisky, the Mechanical Clock.

They were forbidden, of course. to display any second-aspect powers or machines, as these would disrupt things. But they disrupted accidently in building, in tooling, in armies and navies, in harbors and canals, in towns and bridges, in ways of thinking and recording. They started a thing that couldn't be reversed. It was only the One Afternoon they were here, only two or three Eretzi Centuries, but they set a trend. They overwhelmed by the very number of their new devices, and it could never be simple on Eretz again.

There were many thousands of Eretz days and nights in that Long Afternoon. The Children had begun to tire of it, and the hour was growing late. For the last time they wandered off, this time all Seven of them together.

In the bodies of Kings and their Ladies, they strode down a High Road in the Levant. They were wondering what last thing they could contrive, when they found their way blocked by a Pilgrim with a staff.

"Let's tumble the hairy Eretzi," shouted Ralpha. "Let him not stand in the way of Kings!" For Ralpha was King of Bulgaria that day.

But they did not tumble the Pilgrim. That man knew how to handle his staff, and he laid the bunch of them low. It was nothing to him that they were the high people of the World who ordered Nations. He flogged them flat.

"Bleak Children!" that Pilgrim cried out as he beat them into the ground. "Unfledged little oafs! Is it so that you waste your Afternoon on Earth? I'll give you what your Fathers forgot."

Seven-colored thunder, how he could use that staff! He smashed the gaudy bodies of the Children and broke many of their damnable bones. Did he know that it

didn't matter? Did he understand that the bodies they wore were only for an antic?

"Lay off, old Father!" begged Michael Goodgrind, bleeding and half beaten into the earth "Stay your bloody bludgeon. You do not know who we are."

"I know you," maintained the Pilgrim mountainously. "You are ignorant Children who have abused the Afternoon given you on Earth. You have marred and ruined and warped everything you have touched."

"No, no," Ralpha protested — as he set in new bones for his old damaged ones — "You do not understand. We have advanced you a thousand of your years in one of our afternoons. Consider the Centuries we have saved you! It's as though we had increased your life by that thousand years."

"We have all the time there is," said the Pilgrim solidly. "We were well and seriously along our road, and it was not so crooked as the one you have brought us over. You have broken our sequence with your meddling. You've set us back more ways than you've advanced us. You've shattered our Unity."

"Pigs have unity!" Joan shouted. "We've brought you diversity. Think deep. Consider all the machines we have showed you, the building and the technique.

I can name you a thousand things we've given you. You will never be the same again."

"True. We will never be the same," said the Pilgrim. "You may not be an unmixed curse. I'm a plain man and I don't know. Surety is one of the things you've lost us. But you befouled us. You played the game of Immoralities and taught it to us earthlings."

"You had it already," Laurie insisted. "We only brought elegance instead of piggishness to its practice." Immoralities was Laurie's own game, and she didn't like to hear it slighted.

"You have killed many thousands of us in your battles," said the Pilgrim. You're a bitter fruit — sweet at the first taste only."

"You would yourselves have killed the same numbers in battles, and the battles wouldn't have been so good," said Michael. "Do you not realize that we are the higher race? We have roots of great antiquity."

"We have roots older than antiquity," averred the Pilgrim.
"You are wicked Children without compassion."

"Compassion? For the Eretzi?" shouted Lonnie in disbelief.

"Do you have compassion for mice?" demanded Ralpha.

"Yes. I have compassion for mice," the Pilgrim said softly. "I make a guess," Ralpha shot

in shrewdly after they had all repaired their damaged bodies. "You travel as a Pilgrim, and Pilgrims sometimes come from very far away. You are not Eretzi. You are one of the Fathers from Home going in the guise of an Eretzi Pilgrim. You have this routine so that sometimes one of you comes to this world — and to every world — to see how it goes. You may have come to investigate an event said to have happened on Eretz a day ago."

Ralpha did not mean an Eretzi day ago, but a day ago at Home. The High Road they were on was in Coele-Syria not far from where the Event was thought to have happened, and Ralpha pursued his point:

"You are no Eretzi, or you would not dare to confront us, knowing what we are."

"You guess wrong in this and in everything," said the Pilgrim. "I am of this Earth, earthy. And I will not be intimidated by a gangle of children of whatever species! You're a weaker flesh than ourselves. You hide in other bodies, and you get earthlings to do your slaughter. And you cannot stand up to my staff!

"Go home, you witless weanlings!" and he raised his terrible staff again.

"Our time is nearly up. We will be gone soon," said Joan softly.

They played Saints — for the Evil they had done in playing Bodies wrongly, and in playing Wars with live soldiers. But they repented of the things only after they had enjoyed them for the Long Afternoon. They played Saints in hair-shirt and ashes, and revived that affair among the Eretzi.

And finally they all assembled and took off from the high hill between Prato and Firenze in Italy. The rocks flowed like water where they left, and now there would be a double scarp formation.

They were gone, and that was the end of them here.

There is a theory, however, that one of the Hobbles remained and is with us yet. Hobble and his creature could not be told apart and could not finally tell themselves apart. They flipped an Eretzi coin, Emperors or Shields, to see which one would go and which one would stay. One went and one stayed. One is still here.

But, after all, Hobble was only concerned with the sick toys, the mechanical things, the material inventions. Would it have been better if Ralpha or Joan stayed with us? They'd have burned

us crisp by now! They were damnable and irresponsible children.

This short Historical Monograph was not assembled for a distraction or an amusement. We consider the evidence that Children have spent their short vacations here more than once and in both hemispheres. We set out the theses in ordered parellels and we discover that we have begun to tremble unaccountably.

When last came such visitors here? What thing has beset us during the last long Eretzi lifetime?

We consider a new period — and it impinges on the Present — with aspects so different from anything that went before that we can only gasp aghast and gasp in sick wonder:

"Is it ourselves who behave so?
"Is it beings of another sort,
or have we become those beings?

"Are we ourselves? Are these our deeds?"

There are great deep faces looking over our shoulder, there are cold voices of ancient Children jeering "Compassion? For Earthlings?", there is nasty frozen laughter that does not belong to our species.

- R. A. LAFFERTY



The Look

by GEORGE HENRY SMITH

Do you have trouble understanding women's fashions? Here's the key!

Is this the place?" Sam Taylor asked, staring at the rather undistinguished building on a side street in Paris. "It certainly doesn't look like much."

"Maybe not," Jim Harper said, "but it's the salon of the world's leading style designers, Raymond and Anton."

"And you still think they're to blame?"

"You've seen the birth rate statistics," Jim said. "You know what the women who follow their styles look like."

"Yes, I've seen the w-women," Sam almost choked on the word. "But I just can't see all this as a plot. Why would they do it?"

"Do you remember the song called 'Anatole of Paris' that Danny Kaye used to do years ago?" Jim asked. "Remember how he describes all the horrible things he has done to women in the name of fashion, tells of all the incredibly ugly clothes he has persuaded them to wear. The song ends with a line explaining why he does it. 'I do it,' he says, 'because I hate women.'"

"But, Jim, you can't believe women would deliberately follow such . . ."

"My friend, there is only one urge in the human female which is stronger than the urge to marry and reproduce, and that is the urge to look exactly like every other woman . . . the irresistable impulse to follow fashion's dictates."

"You mean like that?" Sam asked, nodding toward two apparently hunchbacked young women hobbling by on feet long since deformed by their needle-pointed shoes.

"Yes," Jim said. "Women are being led to destruction by letting themselves be made so horrible to look at that men can't stand them."

Sam shuddered as two more monstrosities minced past with bulges in all the wrong places. "What can we do? We're just a couple of newspaper men. If the governments of the world are helpless, what can we expect to do?"

"I'm going to prove to those two in there that no matter what they do to women, there will always be some men who can stomach them."

Sam gulped. "You don't . . . you don't mean us?"

"Good Lord, no!" Jim said. "I swore off when they brought out the pinhead look. But I've been looking around and asking questions and I've found a guy . . .

the sexiest, woman chasingest sailor there ever was . . . and we've challenged Raymond to a test. Jerry will be along in a minute and then we'll go on in."

Meanwhile, inside the building, Anton and Raymond were in conference.

"Now, Anton, don't be anymore nasty than you have to," Raymond said. "Things are going rather well."

"No, they're not! We've failed!" Anton wailed, wringing his hands. "In March we introduced the pinhead effect, and in April that delightful rubber lip look, but still . . ."

"We've made gains. You know we have." Raymond said firmly. "We know beyond a shadow of a doubt that women will wear anything or change their physical appearance in any way as long as it's the style."

"But we haven't succeeded until . . . "

"Until right now!" Raymond interrupted triumphantly. "Now we have THE LOOK. Not the New Look or the Sack Look or the Chi Chi Look, but THE LOOK. It is positively, absolutely the most devastating, the most daring thing any of us has done yet."

"I know," Anton pouted, "but I can't help feeling that . . ."

"Even you will be convinced

as soon as those two horrible men get here with their friend.'

"What horrible men?"

"Those two reporter things . . . the ones who have been writing all those nasty stories about our creations."

"The Americans?"

"Yes . . . and they're bringing a sailor with them."

"A sailor? Oh, how lovely!" Anton clapped his delicate hands together.

"You behave, you hear? I've arranged a test and I don't want you lousing it up."

"What kind of test?"

Raymond giggled. "See the curtain over there? Our newest model is behind it, and I've done the work on her myself. Need I say more?"

Anton's eyes widened and then he giggled too. "You mean . . . ?"

"Yes. They actually think they can stop us."

Jim Harper and Sam Taylor entered the salon. Walking between them was a tall, curly-haired, craggy-faced young man in the dress blues of an American sailor.

"Here we are . . . uh . . . gentlemen," Jim said confidently. "This is our champion, Jerry Blake."

"Delighted to meet you, Jerry," Raymond gushed, extending a limp white hand which the

sailor ignored.

"His shipmates call him 'Make Out,' " Jim explained. "We've brought him here to save the human race from a fate worse than death."

"Oh really, it's hardly that bad," Raymond tittered.

"For us it is," Jim said, "but there are some men who will always be able to stand women no matter what you do to them."

"And Jerry is one of those?" Raymond asked.

"That's right. Make Out, tell them what you think of feminine beauty."

The tall boy shrugged. "Beauty? Who needs it? As long as dames has got the equipment for the main event, who cares? I remember one time I met this old bag down in Rio, and . . . well, like the fella says, you can always throw a flag over her face and do it for Old Glory."

"Good boy!" Sam grinned, slapping him on the back.

"Is your model ready?" Jim asked.

"Indeed she is," Raymond said. "She's waiting over there behind that curtain to show your friend our newest creation . . . THE LOOK."

"Go get 'er, Make Out!" Jim said. "And remember, the fate of mankind may depend on what you do now."

"Yes, my boy, it's for more

than Old Glory this time," Sam added.

The sailor grinned and strode nonchalantly across the room and disappeared behind the curtain. Seconds later there was a choking, retching sound and Make Out Jerry Blake staggered toward them, his face ashen and contorted with revulsion.

"What's the matter?" Jim demanded, the color draining from his face.

Jerry didn't say a word. He just became violently sick on the luxurious carpeting of the salon before reeling dizzily out of the building.

"I would say THE LOOK has everything I predicted for it," Raymond said smugly.

Jim and Sam looked at each other, stricken. "How long," Sam asked, "do you think it would take for a man to drink himself to death?"

"I don't know," Jim said "but let's go find out."

"Oh, come now, boys," Anton simpered as they moved toward

the door. "There's always us, you know."

"Yes, we know," Sam said. "God help the human race!"

behind them, Raymond turned to Anton. "Delicious! Delightful! Wasn't that just perfect?"

"Beautiful!" Anton agreed. "We've done it! We've found the way!"

"And the best part is, they still don't know who we are or why we're doing it," Raymond said as he stripped off his false eyelashes and removed the lower half of his face.

"Let's make the call right now," Anton said, lifting off his blonde wig to free his long, green tenactles. "Let's send the alert message."

"Yes," Raymond agreed, "Let's inform Alpha Centauri that the planet Earth will be depopulated and ready for colonization within the next hundred years!"

-GEORGE HENRY SMITH

LOOK WHAT WE FOUND . . .

A few copies of hard-bound first editions of stories from Galaxy, mint condition, brand-new. Some are now out of print and hard to find—but take your pick while they last!

The Space Merchants by Frederik Pohl & C. M. Kornbluth, originally published in Galaxy as Gravy Planet. Hard-cover first edition, \$1.50.

The Demolished Man by Alfred Bester, one of the most talked-about sf novels of all time. \$3.00.

The World That Couldn't Be and others from Galaxy, stories by de Camp, Simak, Knight, etc., edited by H. L. Gold. \$3.95.

Order by letter, enclosing check or money order for amount indicated. Postage paid. Sorry, orders from U.S. only.

Heisenberg's Eyes

by FRANK HERBERT

Illustrated by ADKINS

All the Earth belonged to the Optimen — who didn't know what to do with it!

XVII

To Svengaard, raised in the ordered world of the Optimen, the idea that they were fallible came as heresy. He tried to put it out of his mind and his ears. To be fallible was to be subject to death. Only the lower orders suffered thus, not the Optimen. How could they be fallible?

He knew the surgeon sitting across from him in the pale dawn light that filtered through narrow slots in a domed ceiling. The man was Toure Igan, one of Central's surgical elite, a person to whom only the most delicate genetico-medical problems were posed.

The room they occupied was a tight little space stolen between

What Has Gone Before ---

For more generations than anyone could remember, the world had been perfectly stable — because every newborn child was genetically tailored to fit a certain standard pattern, so that the people at large were made up of replaceable parts, and their rulers, the Optimen, lived practically forever.

But one unborn human embryo, hours old, threatened to destroy the whole millenia-old system. It was mortal . . . but it was also, at least in potentiality, a superman as potent as the Optimen themselves. If the new life was allowed to be born there was no telling what the results would be. Cautious in their immortality, the Opitmen determined to destroy it —

But they could not! Someone had hidden it away!

the walls of an air-system cap, servicing the subterranean warrens of the Cascade Complex. Svengaard sat in a comfortable chair, but his arms and legs were bound. Other people were using the space, crowding past the little table where Igan sat. The people carried oddly shaped packages. For the most part they ignored Igan and his companion.

Svengaard studied the dark, intense features of the Central surgeon. Crease lines in the man's face betrayed the beginnings of enzymic failure. He was starting to age. But the eyes were the blue of a summer sky and still young.

"You must chose sides," Igan had said.

Svengaard allowed his attention to wander. A man passed carrying a golden metallic ball. From one of his pockets protruded a short silver chain on which dangled a breeder fetish in the shape of a lingan.

"You must answer," Igan said. Svengaard looked at the wall beside him—plasmeld, the inevitable plasmeld. The space stank of disinfectants and the ersatz garden effect of air-purifier perfumes.

People continued to pass through the narrow room. The sameness of their garments began to weigh on Svengaard. Who were these people? They were members of the Underground, that was obvious. But who were they?

A woman touched him, crowding past. Svengaard looked up into a white smile in a black face, recognized a Zeek female, a face like Potter's but the skin darker . . . a surgical mistake. She wore a bracelet of human hair on her right wrist. It was blonde hair. Svengaard stared at the bracelet until the woman rounded the curve of the room out of his sight.

66 It's open battle now," Igan said. "You must believe me. Your own life depends on it."

My own life? Svengaard wondered. He tried to think about his own life, identify it. He had a tertiary wife, little more than a playmate, a woman like himself whose every request for a breeder permit had been denied. For a moment he couldn't picture her face, lost the shape of it in memories of previous wives and playmates.

She isn't my life, he thought.
Who is my life?

He was conscious of a fatigue that went to the bone, and a hangover from the narcotics his captors had administered during the night. He remembered the hands seizing him, that gasping look into a wall that could not be a door but was, the lighted space beyond. And he remembered awakening here with Igan across from him.

"I've held nothing back," Igan said. "I've told you everything. Potter barely escaped with his life. The order's already out to get you. Your computer nurse is dead. Many people have died. More will die. They have to be sure, don't you understand? They can leave nothing to chance."

What is my life? Svengaard asked himself. And he thought now about his comfortable apartment, the artifacts and entertainment reels, the reference works, his friends, the safely ordinary routine of his position.

"But where would I go?"

"A place has been prepared."

"No place is safe from them,"

Svengaard said. In saying this, he sensed for the first time the depth of his own resentment against the Optimen.

"Many places are safe," Igan said. "They merely pretend to supersensual perception. Their real powers lie in machines and instruments, the secret surveillance. But machines and instruments can be twisted to other purposes. And the Optimen depend on Folk to do their violence."

Svengaard shook his head. "This is all nonsense."

"Except for one thing," Igan said, "they are as we—variously human. We know this from experience."

"But why would they do these things you accuse them of?" Svengaard protested. "It's not sensible. They're good to us."

"Their sole interest is in maintaining themselves," Igan said.
"They walk a tightrope. As long as there's no significant change in their environment, they'll continue living . . . indefinitely. Let significant change creep into their lives and they are like us—subject to the whims of nature. For them, you see, there can be no nature—no nature they don't control."

"I don't believe it," Svengaard said. "They're the ones who love us and care for us. Look at all they've done for us."

"I have looked." Igan shook his head. Svengaard was being more pig-headed than they'd expected. He screened out contrary evidence and stuck to the old formulas.

"You want them to succumb," Svengaard accused. "Why do you want this?"

"Because they've deprived us of evolution," Igan said.

Svengaard stared at him. "What?"

"They've made themselves the only free individuals in our

world," Igan said. "But individuals don't evolve. Populations evolve, not individuals. We have no population."

"But the Folk . . ."

"Yes, the Folk! Who among us are allowed to mate?" Igan shook his head. "You're a gene surgeon, man! Haven't you identified the pattern yet?"

"Pattern? What pattern? What do you mean?" Svengaard pushed himself up in the chair, cursed his bindings. His arms and legs felt numb.

"The Optimen hold to one cardinal rule of mating," Igan said. "Return to the standard average. They allow a random interchange with the standard average organism to suppress development of unique individuals. Such few unique individuals as occur are not allowed to breed."

Svengaard shook his head. "I don't believe you," he said. But he could feel the beginnings of doubt. His own case—no matter which mate he chose, the breeding permit was denied. He'd examined the genetic matchings himself, had seen configurations he would've sworn were viable—but the Optimen said no.

"You do believe me," Igan said.

"But look at the long lives they give us," Svengaard said. "I can expect almost two hundred years." "Medicine does that, not the Optimen," Igan said. "Delicate, careful refinement of the enzymic prescription's the key. That plus a prescribed life in which emotional upset is held to a minimum. Selected exercises and a diet chosen for your specific needs. It could be done for almost anyone."

"Indefinite life?" Svengaard

whispered.

"No! But long life, much longer than we get now. I'm going on four hundred years, myself as are several of my contemporaries. Almost four hundred *love*ly years," he said, remembering Calapine's vicious phrase . . . and Nourse's chuckle.

"Four hundred—you?" Svengaard asked.

"I agree it's nothing compared to their many thousands," Igan said. But almost anyone could have these years, except they don't permit it."

"Why?" Svengaard asked.

"This way they can offer the bonus years to the selected few," Igan said, "—a reward for service. Without this rule they have no coin to buy us. You knew this! You've been trying to sell yourself to them for this coin all your life."

Svengaard looked down at his bound hands. Is that my life? he wondered. Fettered

hands? Who will buy my fettered hands?

"And you should hear Nourse chuckle at my pitiful four hundred years," Igan said.

"Nourse?"

"Yes! Nourse of the Tuyere, Nourse the Cynic, Nourse of the more than forty thousand years!"

"I've seen Nourse," Igan said.
"Why do you think Nourse is
a Cynic?" Igan demanded.
"There're older Optimen, much older. Most of those aren't Cynics."

"I don't understand," Svengaard said. He stared at Igan, feeling weak, battered, unable to counter the force of these words and arguments.

"I forget you're not of Central," Igan said. "They classify themselves by the tiny bit of emotion they're permitted. They're Actionists, Emotionals, Cynics, Hedonists and Effetes. They pass through cynicism on their way to hedonism. The Tuyere already's well occupied in pursuit of personal pleasure. There's a pattern here, too, and none of it's good."

I g a n studied Svengaard, weighing the effect of his words. Here was a creature barely above the Folk. He was medieval man. To him, Central and the Optimen were the "Primum Mobile" in control of all celestial systems. Beyond Central lay only the

Empyrean home of the Creator . . . and for the Svengaards of the world there was little distinction between Optiman and Creator. Both were higher than the moon and totally without fault.

"Where can we run?" Svengaard asked. "There's no place to hide. They control the enzymic prescriptions. The minute one of us walks into a pharmacy for renewal, that's the end."

"We have our sources," Igan

"But why would you want me?" Svengaard asked. He kept his eyes on his bindings.

"Because you're a unique individual," Igan said. "Because Potter wants you. Because you know of the Durant embryo."

The Durant embryo, Svengaard thought. What's the significance of the Durant embryo? It all comes back to that embryo.

He looked up, met Igan's eyes. "You find it difficult to see the Optimen in my description of them," Igan said.

"Yes."

"They're a plague on the face of the earth," Igan said. "They're the earth's disease!"

Svengaard recoiled from the bitterness of Igan's voice.

"Saul has erased his thousands and David his ten thousands," Igan said. "But the Optimen erase the future." A blocky hulk of a man squeezed past the narrow space beside the table, planted himself with his back to Svengaard.

"Well?" he asked. The voice carried a disturbing tone of urgency, just in that one word. Svengaard tried to see the face, but couldn't move far enough to the side. There was just that wide belted back in a gray jacket.

"I don't know," Igan said.

"We can spare no more time," the newcomer said. "Potter has completed his work."

"The result?" Igan asked.

"He says successful. He used enzymic injection for quick recovery. The mother will be ready to move soon." A thick hand moved over the shoulder to point a thumb at Svengaard. "What do we do with him?"

"Bring him," Igan said. "What's Central doing?"

"Ordered arrest and confinement of every surgeon."

"So soon? Did they get Dr. Hand?"

"Yes, but he took the black door."

"Stopped his heart," Igan said.
"The only thing. We can't let
them question one of us. How
many does that leave us?"

"Seven?"

"Including Svengaard?"

"Eight then."

"We'll keep Svengaard re-

strained for the time being," Igan said.

"They're beginning to pull their special people out of Seatac," the big man said.

Svengaard could see only half of Igan's face past the newcomer, but that half showed a deep frown of concentration. The one visible eye looked at Svengaard, disregarded him.

"It's obvious," Igan said.

"Yes—they're going to destroy the megalopolis."

"Not destroy sterilize."

"You've heard Allgood speak of the Folk?"

"Many times. Vermin in their warrens. He'll step on the entire region without a qualm. Is everything ready to move?"

"Ready enough."

"The driver?"

"Programmed for the desired response."

"Give Svengaard a shot to keep him quiet, then. We won't have time for him once we're on the road."

Svengaard stiffened.

The bulky back turned. Svengaard looked up into a pair of glistening eyes, gray, measuring, devoid of emotion. One of the thick hands lifted, carrying a springshot ampule. The hand touched his neck and there was a jolt.

Svengaard stared up at that faceless face while the fuzzy

clouds closed around his mind. His throat felt thick, tongue useless. He willed himself to protest, but no sound came. Awareness became a tightening globe centered on a tiny patch of ceiling with slotted openings. The scene condensed, smaller and smaller—a frantic circle like an eye with slotted pupils.

He sank into a cushioned well of darkness.

XVIII

Lizbeth lay on a bench with Harvey seated beside her, steadying her. There were five people here in a cubed space no bigger than a large packing box. The box had been fitted into the center of a normal load on an overland transporter van. A single glowtube in the corner above her head illuminated the interior with a sickly yellow She could see Doctors light. Igan and Boumour on a rough bench opposite her, their feet across stretched the bound. gagged and unconscious figure of Svengaard on the floor.

It was already night outside, Harvey had said. That must mean they'd come a goodly distance, she thought. She felt vaguely nauseated and her abdomen ached around the stitches. The thought of carrying her son within her carried a strange reassur-

ance. There was a sense of fulfillment in it. Potter had said
she likely could do without her
regular enzymes while she carried
the embryo. He'd obviously been
thinking the embryo would be
removed into a vat when they
reached a safe place. But she
knew she'd resist that. She wanted to carry her son full term. No
woman had done that for thousands of years, but she wanted it.

"We're picking up speed," Igan said. "We must be out of the tubes onto the skyway."

"Will there be check points?"
Boumour asked.

"Bound to be."

Harvey sensed the accuracy of Igan's assessment. Speed? Yes—their bodies were compensating for heavier pressure on the turns. Air was coming in a bit faster through the scoop ventilator under Lizbeth's bench. There was a new hardness to the groundeffect suspension, less bounce. The turbines echoed loudly in the narrow box, and he could smell unburned hydrocarbons.

Check points? Security would use every means to see that no one escaped Seatac. He wondered then what was about to happen to the megalopolis. The surgeons had spoken of poison gas in the ventilators, sonics. Central had many weapons, they said. Harvey put out an arm to hold Lizbeth as they rounded a sharp corner.

He didn't know how he felt about Lizbeth carrying their son within her. It was odd. Not obscene or disgusting . . . just odd. An instinctive response had come to focus within him, and he looked around for dangers from which he could protect her. But there was only this box filled with the smell of stale sweat and oil.

"What's the cargo around us?" Boumour asked.

"Machinery parts, some old art works, inconsequential things. We took anything we could pirate to make a seemingly normal load."

Inconsequentials, Harvey thought. He found himself fascinated by this revelation. Inconsequentials. They carried parts to things that might never be built.

Lizbeth's hand groped out, found his. "Harvey?"
He bent over her. "Yes, dear?"
"I feel . . . so . . . funny."

Harvey cast a despairing look at the doctors.

"She'll be all right," Igan said.
"Harvey, I'm afraid," she said.
"We're not going to get through."

"That's no way to talk." Igan said.

She looked up, found the gene surgeon studying her across the narrow space of the box. His eyes were a pair of glittering instruments in a slim, supercilious face.



Is he a Cyborg, too? she wondered. The cold way the eyes stared at her broke through her control.

"I don't care about myself!" she hissed. "But what about my son?"

"Best calm yourself, madam," Igan said.

"I can't," she said. "We're not going to make it!"

"That's no way to act," Igan said. "Our driver is the finest Cyborg available."

"He'll never get us past them," she moaned.

"You'd best be quiet," Igan said.

Harvey at last had an object from which to protect his wife. "Don't talk to her that way!" he barked.

Igan spoke in a long-suffering tone: "Not you too, Durant. Keep your voice down. You know as well as I do they'll have listening stations along the skyway. We shouldn't be speaking now unless it's absolutely necessary."

"Nothing can get past them tonight," Lizbeth whispered.

"Our driver is little more than a shell of flesh around a reflex computer," Igan said. "He's programmed for just this task. He'll get us through if anyone can."

"If anyone can," she whispered. She began to sob—wracking, convulsive movements that shook her whole body.

"See what you've done!" Harvey said.

Igan sighed, brought up a hand containing a capsule, extended the capsule to Harvey. "Give her this."

"What's that?" Harvey demanded.

"Just a sedative."

"I don't want a sedative," she sobbed.

"It's for your own good, my dear," Igan said. "Really this could dislodge the embryo. You should remain calm and quiet this soon after the operation."

"She doesn't want it," Harvey said. His eyes glared with anger. "She has to take it," Igan said.

"Not if she doesn't want it."

Igan forced his voice into a reasonable tone. "Durant, I'm only trying to save our lives. You're angry now and you . . ."

"You're damn right I'm angry!
I'm tired of being ordered
around!"

"If I've offended you, I'm sorry Durant," Igan said. "But I must caution you that your present reaction is conditioned by your gene shaping. You've excess male protectiveness. Your wife will be all right. This sedative is harmless. She's hysterical because she has too much maternal drive. These are flaws in your gene shaping, but you'll both be all right if you remain calm."

"Who says we're flawed?" Harvey demanded. "I'll bet you're a Sterrie who's never . . ."

"That's quite enough, Durant," the other doctor said. It was a rumbling, powerful voice.

Harvey looked at Boumour, noted the pinched-up elfin face on the big body. The surgeon appeared powerful and dangerous, the face strangely inhuman.

"We cannot fight among ourselves," Boumour rumbled. "We may be getting near the check point. They're sure to have listening devices."

"We aren't flawed," Harvey growled.

"Perhaps you're right," Igan said. "But you're both reducing our chances of escape. If one of you breaks up at that check point, that's the end of us." He shifted his hand, extended the capsule to Lizbeth. "Please take this, madame. It contains a tranquilizer. Quite harmless, I assure you."

Hesitantly, Lizbeth took the capsule. It felt cold and gelatinous against her fingers—repulsive. She wanted to hurl the thing at Igan, but Harvey touched her cheek.

"Maybe you'd better take it," he said. "For the baby."

She brought up her hand, popped the capsule against the back of her tongue, gulped it. It must be all right if Harvey

agreed. But she didn't like the hurt, baffled look in his eyes.

"Now relax," Igan said. "It's fast acting—three or four minutes and you'll feel quite calm." He sat back, glanced down at Svengaard. The trussed figure still appeared to be unconscious, chest rising and falling in an even rhythm.

For what felt like a long time now, Svengaard had been increasingly aware of hunger and a swooping, turning motion that rolled his body against a hard surface. There was a sensation of swiftness about the motion. He human perspiration, smelled heard the roar of turbines. The sound was beginning to press on his consciousness. There was light, dim and fuzzy, through uncooperative eyelids. He felt a gag biting his lips, bindings on hands and feet.

Svengaard opened his eyes.

For a moment he failed to focus. Then he found himself staring up at a low ceiling, a tiny glowtube in the corner with a speaker grill beneath it bulging beside a dull ruby call light. The ceiling seemed too close to him, and there was a blurred shadow shape to his right. A leg stretched across him. The single light emitted a yellow glow that almost failed to dispel the darkness.

The ruby light began winking,

red fire flashing on and off.
"Check point!" Igan hissed.
"Silence everyone!"

They sensed the van begin to slow. Its air suspension became softer and softer. The turbines whined downscale. They rocked to a stop, and the turbines whispered into stand-by.

Svengaard's gaze darted around the enclosure. A rough bench above him to his right . . . two figures seated on it. A sharp edge of metal protruded from the bench support beside his cheek. Softly, gently, Svengaard moved his head toward the metal projection, felt it touch flesh through the gag. He gave a gentle push of his head upward, and the gag pulled down slightly. The projection scratched his cheek, but he ignored it. Another gentle tug and the gag lowered another fraction of a millimeter. He turned his eyes, checking his surroundings, saw Lizbeth's face above him to the left, her eyes closed, hands in front of her mouth. There was a sense of suspended terror about her.

Again, Svengaard moved his head.

There were voices somewhere in a remote distance—sharp sounds of questions, murmurous answers.

Lizbeth's hands lowered to reveal her mouth. The lips moved soundlessly.

The sound of talking had stopped.

Slowly the van began to move.

Svengaard twisted his head.

The binding of his gag broke free. He coughed it from his mouth, shouted: "Help! Help! I'm a prisoner! Help!"

Igan and Boumour leaped with shock. Lizbeth screamed: "No! Oh, no!"

Harvey surged forward, crashed a fist into Svengaard's jaw, fell on him with one hand over the man's mouth. They held their positions in an agony of listening as the van continued to gather speed.

Igan took a trembling breath, looked across into the wide staring eyes of Lizbeth.

The voice of their driver came through the speaker grill: "What is the trouble? Can't you observe the simplest precautions?"

The dispassionate, accusing quality of the voice chilled Harvey. He wondered about the driver then, why the creature took this tone rather than telling them if they'd been exposed. Svengaard felt limp and unconscious beneath him, Harvey realized. He experienced a wild desire to throttle the surgeon here and now, could almost feel his hands around the man's throat.

"Did they hear us?" Igan whispered.

"Apparently not," the driver rasped. "No sign of pursuit. I presume you'll not permit another such lapse. Please report on what happened."

"Svengaard wakened from the narcotic sooner than we expected."

"But he was gagged."

"He . . . managed to get the gag off . . . somehow."

"Perhaps you should kill him. Obviously he will not take reconditioning."

Harvey pushed himself off Svengaard. Now that the Cyborg had made the suggestion, he no longer felt like killing Svengaard. Who was it up there in the van's cab? Harvey wondered. Cyborgs tended to sound alike, that computer personality with its altitude of logic so far above the human. This one, though, came through even more remote than usual.

"We'll . . . consider what to do," Igan said.

"Svengaard is again secure?"
"He's been taken care of."

"No thanks to you," Harvey said, staring at Igan. "You were right over him."

Igan's face paled. He remembered his frozen immobility after that leap of fear. Anger surged through him. What right had this clod to question a surgeon? He spoke stiffly: "I regret that I'm not a man of violence."

"Something you'd better

learn," Harvey said. He felt Lizbeth's hand on his shoulder, allowed her to guide him back onto their bench. "If you have more of that knockout stuff, maybe you'd better use another dose of it on him before he wakes up again."

Igan suppressed a sharp reply. "In the bag under our bench," Boumour said. "A reasonable suggestion."

Woodenly, Igan groped for a slapshot, administered it to Sven-gaard.

A gain the driver's voice barked through the speaker: "Attention! We must not presume from the lack of immediate and obvious pursuit that they failed to hear the outcry. I am executing Plan Gamma."

"Who is that driver?" Harvey whispered.

"I didn't see which one they programmed," Boumour said. He studied Harvey. That had been an appropriate question. The driver did sound odd, much more so than the usual Cyborg abnormality. They'd said the driver would be a programmed reflex computer, a machine designed to give the surest response to achieve their escape. Who did they choose for that program?

"What's Plan Gamma?" Lizbeth whispered.

"We're abandoning the pre-

pared escape route," Boumour said. He stared at the forward wall of their box. Abandoning the prepared route . . . which meant they'd be completely dependent now upon the abilities of the Cyborg driver . . . and whichever scattered cells of the Underground remained and were available. Any one of those cells could've been compromised, of course. Boumour's usually stolid nature began to entertain odd wisps of fear.

"Driver!" Harvey called.

"Silence," the driver snapped.
"Stick to the original plan,"
Harvey said. "They have the
medical facilities there if my
wife..."

"Your wife's safety is not the overriding factor," the driver said. "Elements along the prepared route must not be discovered. Do not distract me with your objections. Plan Gamma is being executed."

"Easy does it," Boumour said as Harvey surged forward, supporting himself with a hand on the bench. "What can you do, Durant?"

Harvey sagged back onto the bench, groped for and found Lizbeth's hand. She squeezed it, signaled: "Wait. Don't you read the doctors? They're frightened too and worried."

"I'm worried about you," Harvey signaled. So her safety—and presumably ours—aren't the overriding concern, Boumour thought. What then is the overriding concern? What program controls our computer-in-flesh?

XIX

Only Nourse of the Tuyere occupied a throne in the Survey Globe, his attention on the rays, the winking lights and gauges, the cascading luminescences that reported affairs of the Folk. A telltale told him it was night outside in this hemisphere — darkness that spread across the land from Seatac to the megalopolis of N'Scotia. He saw the physical darkness as a sign of frightening events to come and wished Schruille and Calapine would return.

The visual-report screen came alight. Nourse turned to face it as Allgood's features appeared there. The Security boss bowed to Nourse.

"What is it?" Nourse asked. "Seatac Checkpoint East reports a van with an odd load of containers has just gone through, Nourse. Its turbines carried masking mutes which we deciphered. The mutes concealed sounds of breathing—five persons hidden in the load. Voices cried out from within as the van pulled away. Acting on your in-

structions, we put a drop marker onto the van and now have it under observation. What are your orders?"

It begins, Nourse thought. While I'm alone here it begins.

Nourse looked to the instruments covering the checkpoints. Seatac East. The van was a moving green pinpoint on a screen. He read the banked binaries describing the incident, compared them with a total-plan motivational analysis. The probability analogues he derived filled him with a sense of doom.

"The voices have been identified, Nourse," Allgood said. "The voice prints were . . ."

"Svengaard and Lizbeth Durant," Nourse said.

"Where she is, her husband cannot be far away," Allgood said.

Allgood's logical little announcements began to annoy Nourse. He contained the emotion while noting the man had overlooked the use of the Optiman's name-in-address. It was a small sign, but significant, especially when Allgood appeared not to notice his own lapse.

"Which leaves us two unidentified," Nourse said.

"We can make an educated guess . . . Nourse."

Nourse glanced at his probability analogues, said: "Two of our wayward pharmacists." "One may be Potter, Nourse."
Nourse shook his head. "Potter remains in Seatac."

"They may have a portable vat, Nourse, and that embryo with them," Allgood said, "but we failed to detect appropriate machinery."

"You would not hear the machinery being used," Nourse said.
"Or, hearing it, you would not identify it."

Nourse looked up to the banks of scanners—every one of them alive—showing the Optimen observing their Survey Globe. Night or day, the watching channels were jammed. They know what I mean, he thought. Are they disgusted, or is this just another interesting aspect of violence?

As could have been predicted, Allgood said: "I fail to understand Nourse's meaning."

"No need," Nourse said. He looked at the face in the screen. So young it appeared, but Nourse had begun to notice a thing: There was much youngness in Central, but no youth. Even the Sterrie servants betrayed this fact to the unveiled eye. He felt himself to be like the Sterrie Folk suddenly, watching each other for evidence of aging, hoping by comparison that their own appearance prospered.

"What are Nourse's instructions?" Allgood asked.

"Svengaard's outcry indicates he's a prisoner," Nourse said. "But we must not overlook the possibility this is an elaborate ruse."

"Shall we destroy the van, Nourse?"

"Destroy . . ." Nourse shuddered. "No! Not yet. Keep it under surveillance. Put out a general alert. We must discover where they're headed. Every contact they make must be noted and marked down for attention."

"If they elude us. Nourse, it could . . ."

"You've flagtapped the appropriate enzyme prescriptions?"
"Yes, Nourse."

"Then they cannot run far . . . or long."

"As you say, Nourse."

"You may go," Nourse said.

He watched the screen long after it had turned blank. Destroy the van? That would be an ending. He felt then that he did not want this game to end—ever. A curious feeling of elation crept through him.

The globe's entrance segment swung below him. Calapine entered, followed by Schruille. They rode the climbing beam to their seats on the triangular dais. Neither spoke. They appeared withdrawn, oddly calm. Nourse

thought of a controlled storm as he looked at them — the lightning and the thunder contained so that it might not harm their fellows.

"Is it not time?" Calapine asked.

A sigh escaped Nourse.

Schruille activated the sensor contact with the scanners in the mountains. There was moonlight suddenly in the receiving screens, the sounds of nightbirds, a rustling of dry leaves. Far off across moon-frosted hills lay lines and patches of lights tracing the coast and harbors of the megalopolis and the multi-level skyway networks.

Calapine stared at the scene, thinking of jewels and casual baubles, the playthings of idleness. She'd not had the inclination in several centuries to indulge in such toys. Why should I think of them now? she wondered. These are not toys.

Nourse examined the binary pyramids, the action analogues showing the course of Folk activity within the megalopolis.

"All is normal ... and in readiness," he said.

"Normal!" Schruille said.

"Which of us?" Calapine whispered.

"I have seen the necessity longest," Schruille said. "I will do it." He rolled a looping ring in the arm of his throne.

As he moved it, he was appalled by the simplicity of the action. This ring and the powers it controlled had been at hand for eons, an unsensitive linkage of machinery. All it took was a simple turning motion, a hand and the will behind the hand.

Calapine watched the scene in her screens — moonlight on hills, the megalopolis beyond, an animated toy subject to her whims. The last cadre of special personnel had departed, she knew. Irreplaceable objects that might be damaged had been removed. All was ready and doomed.

Winking flares began to appear through the necklaces of light—golden yellow flares. The Tuyere's screens blurred as sonics vibrated the distant scanners. Lights began going out. Across the entire region, the lights went out—in groups and one by one. A low green fog rolled across the scene, filling in the valleys, overrunning the hills.

Presently no lights were visible. Only the green fog remained. It continued to creep out beneath the impersonal moon, moving out and across and through until it remained and nothing more.

Schruille watched the stacked numerical analogues, the unemotional reporters which merely counted, submitted deductions of sortings, remainders . . . zeroes. Nothing showed Folk dying in the tubes and warrens, in the streets . . . at their labors . . . at their play.

Nourse sat weeping.

They are dead, all dead, he thought. Dead. The word felt peculiar in his mind, devoid of personal meaning. It was a term that could be applied to bacteria perhaps . . . or to weeds. One sterilized an area before bringing in lovely flowers. Why I weep? He tried to remember if he'd ever wept before. Perhaps there was a time when I wept, he thought. But it was so long ago. Ago . . . ago . . . ago . . . time ... time ... wept . . . wept. They were words suddenly without meaning. That's the trouble with endless life, he thought. With too much repetition, everything loses meaning.

Schruille studied the green fog in his screens. A few repairs, and we'll be able to send in new Folk, he thought. We'll repopulate with Folk of a safer cut. He wondered then where they'd find the safer Folk. The globe's analysis boards revealed that the Seatac problem was only one of many such pockets. Symptoms were everywhere the same.

He could see the flaw. It centered on the isolation of one generation from another. Lack of traditions and continuity became

an obsession with the Folk . . . because they seemed to communicate no matter what repressions were tried. Folk sayings would crop up to reveal the deep current beneath.

Schruille quoted to himself: "When God first created a dissatisfied man, He put that man outside Central."

But we created these Folk, Schruille thought. How did we create dissatisfied men?

He turned then and saw that Calapine and Nourse were weeping.

"Why do you weep?" Schruille demanded.

But they remained silent.

XX

Where the last skyway ended, the van took the turn away from the undermountain tube and held to the wide surface track on the Lester by-way. It led upward through old tunnels to the wilderness reserve and breeder-leave resorts along an almost deserted air-blasted roadbed. There were no slavelights up here — only the moon and the stabbing cyclops beam of the van's headlight.

An occasional omnibus passed them on the downtrack, the passenger seats occupied by silent, moody couples, their breeder leave ended, heading back to the megalopolis. If any of them focused on the van, it was dismissed as a supply carrier for the resorts.

On a banked curve below the Homish Resort Complex, the Cyborg driver made a series of adjustments to his lift controls. Venturis narrowed. Softness went out of the ride. Turbines whined upward to a near destructive keening. The van turned off the roadbed.

Within the narrow box that concealed them, Harvey Durant clutched the bench with one hand and Lizbeth with the other as the van lurched and bounced across the eroded mounds of an ancient railroad right of way, crashed through a screen of alders and turned onto a game track that followed the right of way upward through buck brush and rhododendrons.

"What's happening?" Lizbeth wailed.

The driver's voice rasped through the speaker: "We have left the road. There is nothing to fear."

Nothing to fear, Harvey thought. The idea appeared so ludicrous he had to suppress a chuckle which he realized might be near hysteria.

The driver had turned off all exterior lights and was relying now on the moon and his infrared vision.

The cyborg-boosted vision revealed the trail as a snail track through the brush. The van gulped this track for two kilometers, leaving a dusty, leaf-whirling wake to a point where the game trail intersected a forest patrol road — a cleared track matted with dead salal and bracken from the passage of the patrol vehicles. Here, it turned right like a great hissing prehistoric monster, labored up a hill, roared down the other side and to the other side and to the top of another hill where it stopped.

Turbines whined down to silence, and the van settled onto its skids. The driver emerged, a blocky stub-legged figure with glittering prosthetic arms attached for its present needs. A side panel was ripped off and the Cyborg began unloading cargo, tossing it indiscriminately down through a stand of hemlock into a deep gully.

Within their compartment, Igan lurched to his feet, put his mouth near the speaker-phone and whispered: "Where are we?"

Silence.

"That was stupid," Harvey said. "How do you know why he's stopped?"

Igan ignored the insult. It came after all from a semi-educated dolt. "You can hear him

shifting cargo," Igan said. He leaned across Harvey, pounded a palm against the compartment's side. "Whats 'going on?"

"Oh, sit down," Harvey said. He put a hand on Igan's chest, pushed. The surgeon stumbled backward onto the opposite bench.

Igan started to bounce back, his face dark, eyes glaring. Boumour restrained him, rumbled: "Serenity, friend Igan."

Igan settled back. Slowly, a look of patience came over his features. "It's odd," he said, "how one's emotions have a way of asserting themselves in spite of . . ."

"That will pass," Boumour said.

Harvey found Lizbeth's hand, clutched it, signaled: "Igan's chest — it's convex and hard as plasmeld. I felt it under his jacket."

"You think he's Cyborg?"
"He breathes normally."

"And he has emotions. I read fear on him."

"Yes ... but ..."

"We will be careful."

Boumour said: "You should place more trust in us, Durant. Doctor Igan had deduced that our driver would not be moving cargo unless certain sounds were safe."

"How do we know who's moving cargo?" Harvey asked.

A look of caution fled across Boumour's massive calm.

Harvey read it, smiled.

"Harvey!" Lizbeth said. "You don't think the . . ."

"It's our driver out there," Harvey reassured her. "I can smell the wilderness in the air. There's been no sound of a struggle. One doesn't take a Cyborg without a struggle."

"But where are we?" she asked.

"In the mountains, the wilderness," Harvey said. "From the feel of the ride, we're well off the main by-ways."

Abruptly, their compartment lurched, slid sideways. The single light was extinguished.

In the sudden darkness, the wall behind Harvey dropped away. He clutched Lizbeth, whirled, found himself looking out into darkness . . . moonlight ... their driver a blocky shadow against a distant panorama of the megalopolis with its shimmering networks of light. The moon silvered the tops of trees below them, and there was a sharp smell of forest duff, resinous, dank, churned up by the van and not yet settled. The wilderness lay silent as though waiting, anolyzing the intrusion.

"Out," the driver said.

The Cyborg turned. Harvey saw the features suddenly

illuminated by moonlight, said: "Glisson!"

"Greetings, Durant," Glisson said.

"Why you?" Harvey asked. "Why not?" Glisson asked. 'Get out of there now."

Harvey said: "But my wife isn't . . ."

"I know about your wife," Durant. "She's had plenty of time since the treatment. She can walk if she doesn't exert herself."

Igan spoke at Harvey's ear: "She'll be quite all right. Sit her up gently and help her down."

"I... feel all right," Lizbeth said. "Here." She put an arm over Harvey's shoulder. Together they slipped down to the ground.

Igan followed, asked: "Where are we?"

"We are someplace headed for someplace else," Glisson said. "What is the condition of our prisoner?"

Boumour spoke from within the compartment: "He's coming around. Help me lift him out."

"Why've we stopped?" Harvey asked.

"There is steep climbing ahead," Glisson said. "We're dropping the load. A van isn't built for this work."

Boumour and Igan shouldered past them carrying Svengaard and propped him against a stump beside the track.

"Wait here while I disengage the trailer," Glisson said. "You might be considering whether we should abandon Svengaard."

Hearing his name, Svengaard opened his eyes, found himself staring out and down at the distant lights of the megalopolis. His jaw ached where Harvey had struck him, and there was a throbbing in his head. He felt hungry, thirsty. His hands were numb beyond the bindings. A dry smell of evergreen needles filled his nostrils. He sneezed.

"Perhaps we should get rid of Svengaard," Igan said.

"I think not," Boumour said.

"He's a trained man, a possible ally. We're going to need trained men."

Svengaard looked toward the voices. They stood beside the van which was a long silvery shape behind a stubby double cab. A wrenching of metal sounded there. The trailer slid backward on its skids almost two meters before stopping against a mound of dirt.

Glisson returned, squatted beside Svengaard. "What is our decision?" the Cyborg asked. "Kill him or keep him?"

Harvey gulped, felt Lizbeth clutch his arm.

"Keep him yet awhile," Boumour said.

"If he causes no more trouble," Igan said.

"We could always use his parts," Glisson said. "Or grow a new Svengaard and retrain it." The Cyborg stood. "Not always successful, though. An immediate decision isn't necessary. It is a thing to consider."

Svengaard remained silent, frozen by the emotionless clarity of the man's speech. A hard, brutal man, he thought. A tough man, prepared for any violence. A killer.

"Into the cab with him then," Glisson said. "Everyone into the cab. We must get . . ." The Cyborg broke off, stared out toward the megalopolis.

Svengaard turned toward the strings of blue-white light glittering far away and cold. A winking golden flare had appeared amidst the lights on his left. Another blazed up beyond it — a giant's bonfire set against the background of distant, moonfrosted mountains. More yellow flares appeared to the right. A bone-chilling rattle of sonics shook him, jarred a sympathetic metal dissonance from the van.

"What's happening?" Lizbeth hissed.

"Quiet," Glisson said. "Quiet and observe."

"Gods of life," Lizbeth whispered, "what is it?"

"It is the death of a megalopolis," Boumour said. Again sonics rattled the van.

"That hurts," Lizbeth whimpered.

Harvey pulled her close, muttered: "Damn them!"

"Up here it hurts,' Igan said, his voice chillingly formal. "Down there it kills."

Green fog began emerging from the wilderness some ten kilometers below them. It rolled out and down like a furious downy sea beneath the moon, engulfing everything — hills, the gem-like lights, the yellow flares.

"Did you think they would use the death fog?" Boumour asked.

"We knew they would use it," Glisson said.

"I suppose so," Boumour said. "Sterilize the area."

"What is it?" Harvey demanded.

"It comes from the vents where they administered the contraceptive gas," Boumour said. "One drop on your skin is the end for you."

Igan moved around, stared down at Svengaard. "They are the ones who love us and care for us," he mocked.

"What's happening?" Svengaard asked.

"Can you not hear?" Igan asked. "Can you not see? Your friends the Optimen are sterilizing Seatac. Did you have friends there?"

"Friends?" There was a

broken quality to Svengaard's voice. He turned back to stare at the green fog. The distant lights had all been extinguished.

Again, sonics chattered through them, shook the ground, rattled the van.

"What do you think of them now?" Igan asked.

Svengaard shook his head, unable to speak. He wondered why he had no sensory fuse system to shut off this scene. He felt chained to awareness through sense organs gone abnormal beyond any previous experience... a permissive aberration. His senses were deceiving him, that was it. This was a special case of self-deception.

"Why don't you answer me?" Igan asked.

"Leave him alone," Harvey said. "We've griefs of our own. Haven't you any feelings?"

"He sees it and does not believe," Igan said.

"How could they?" Lizbeth whispered.

"Self-preservation," Boumour rumbled. "A trait our friend Svengaard doesn't seem to have. Perhaps it was cut out of him."

Svengaard stared at the rolling green cloud. So silent and steal-thy it was! The great reach of darkness where once there had been light and life filled him with a raw awareness of his own mor-

tality. He thought of friends down there — the hospital staff ... embroyos ... his playmate-wife.

All destroyed.

Svengaard felt emptied, incapable of any emotion — not even grief. He could only question: What was their purpose?

"Into the cab with him," Glisson said. "On the floor in the rear."

Ungentle hands lifted Svengaard — he identified Boumour and Glisson. The driver's unemotional quality confused Svengaard. He had never before encountered quite that abstract detachment in a human being.

They pushed him onto the floor of the van's cab. The sharp edge of a seat brace dug into his side. Feet came in around him. Someone put a foot on his stomach, recoiled. The turbines came alive. A door was slammed. They glided into motion.

Svengaard sank into a kind of stupor.

Lizbeth seated above him heaved a deep sigh. Hearing it, Svengaard was roused to a feeling of compassion for her, his first emotion since the shock of seeing the megalopolis die.

Why did they do it? he asked himself. Why?

In the darkness, Lizbeth gripped Harvey's hand. She could see in an occasional patch

of moonglow the outline of Glisson directly ahead of her. The Cyborg's minimal movement, the sense of power in every action, filled her with growing disquiet. The scar of her operation itched. She wanted to scratch, but feared calling attention to herself. The Courier Service had been a long time building its own organization, deceiving both the Cyborgs and the Optimen. They'd done it partly through self-effacement. Now, in her fear, she sank back into that treatment.

Through their hands, Harvey signaled: "Boumour and Igan, I read them now. They're new Cyborgs. Probably just a first linkage with implanted computers. They're just learning the price, shedding their normal human emotional reactions, learning to counterfeit emotion."

She absorbed this, seeing them through Harvey's deduction. He often read people better than she did. She reread what she had seen of the two surgeons.

"Do you read it?" he signaled.
"You're right. Yes."

"It means a total break with Central. They can never go back."

"That explains Seatac," she signaled. She began to tremble.

"And we can't trust them," Harvey said. He pressed her close, soothing her.

The van labored up through the foothills, skirting open meadows, following ancient tracks, an occasional streambed. Shortly before dawn, it swerved left down a firebreak and into a stand of pines and cedars, squeezed its way through a narrow lane there with its blowers kicking up a heavy cloud of forest duff behind. Glisson pulled to a stop behind an old building, moss on its sides, small curtained windows. Pseudo ducks, with a weedy patina and grass-grown signs that they hadn't been animated in years, made a short file near the building — pale moonfigures in the light of a single bulb high up under the building's eaves.

Turbines whined to silence. They could hear then the hum of machinery and looking toward the sound saw the dull silver outline of a ventilator tower among the trees.

A door at the corner of the building opened. A heavy-headed man with a big jaw, stoopshouldered, emerged blowing his nose into a red handkerchief. He looked old, his face a mask of subservience.

Glisson said: "It's the sign. All is safe here... for the moment." He slipped out, approached the old man, coughed.





HEISENBERG'S EYES

"A lot of sickness around these days," the old man said. His voice was as ancient as his face, wheezing, slurring the consonants.

"You're not the only one with troubles," Glisson said.

The old man straightened, shed the stooped look and subservient manner. "S'pose you're wanting a hidey hole," he said. "Don't know if it's safe here. Don't even know if I oughta hide you."

"I will give the orders here," Glisson said. "You will obey."

The old man studied Glisson a moment, then a look of anger washed over his face. "You damn Cyborgs!" he said.

"Hold your tongue," Glisson said, his voice flat. "We need food, a safe place to spend the day. I shall require your help in hiding this van. You must know the surrounding terrain. And you will arrange other transportation for us."

"Best cut it up and bury it," the old man said, his voice surly. "Been a hornet's nest stirred up. Guess you know that."

"We know," Glisson said. He turned, beckoned to the van. "Come along. Bring Svengaard."

Presently the others joined him.
Boumour and Igan supported Svengaard between them. The bindings on Svengaard's feet had

been released, but he appeared barely able to stand. Lizbeth walked with the bent-over care that said she wasn't sure her incision had healed, despite the enzymic speed-up medication.

"We will lodge here during daylight," Glisson said. "This man will direct you to quarters."

"What word from Seatac?" Igan asked.

Glisson looked at the old man, said: "Answer."

The oldster shrugged. "Courier through here couple of hours ago. Said no survivors."

"Any report on a Dr. Potter?" Svengaard croaked.

Glisson stared at Svengaard. "Dunno," the old man said. "What route he take?"

Igan cleared his throat, glanced at Glisson, then at the old man. "Potter? I believe he was in the group coming out by the power tubes."

The old man flicked a glance at the ventilator tower growing more distinct among the trees by the second as daylight crept across the mountains. "Nobody come through the tubes," he said. "They shut off the ventilators and flooded the tubes with that gas first thing." He looked at Igan. "Ventilators been going again for about three hours."

Glisson studied Svengaard, asked: "Why are you interested in Potter?"

Svengaard remained silent.

"Answer me!" Glisson ordered.
Svengaard tried to swallow.
His throat ached. He felt driven into a corner. Glisson's words enraged him. Without warning, Svengaard lurched forward, dragging Igan and Boumour, lashed out at Glisson with a foot.

The Cyborg dodged with a blurring movement, caught the foot, jerked Svengaard from the two surgeons, whirled, swung Svengaard wide and released him. Svengaard landed on his back, skidded across the ground, stopped. Before he could move, Glisson was standing over him. Svengaard lay there sobbing.

"Why are you interested in Potter?" Glisson demanded.

"Go away, go away, go away," Svengaard sobbed.

Glisson straightened, looked around at Igan and Boumour. "You understand this?"

Igan shrugged. "It's emotion." "Perhaps a shock reaction," Boumour said.

Through their hands, Harvey signaled Lizbeth: "He's been in shock, but this means he's coming out of it. These are medical people! Can't they read anything?"

"Glisson reads it," she answered. "He was testing them."

Glisson turned around, looked squarely at Harvey. The bold understanding in the Cyborg's eyes

shot a pang of fear through Harvey.

"Careful," Lizbeth signaled.
"He's suspicious of us."

"Take Svengaard inside," Glisson said.

Svengaard looked up at their driver. Glisson, the Durants called him. But the old man from the building had labeled Glisson a Cyborg. Was it possible? Were the half-men being revived to challenge the Optimen once more? Was that the reason for Seatac's death?

Boumour and Igan lifted him, checked the fetters on his hands. "Let's have no more foolishness," Boumour said.

Are they like Glisson? Svengaard asked himself. Are they, too, part man, part machine? And what about the Durants?

Svengaard could feel the tear-dampness in his eyes. Hysteria, he thought. Coming out of shock. He began to wonder at himself then with an odd feeling of guilt. Why does Potter's death strike me more deeply than the death of an entire megalopolis, the extinction of my wife and friends? What did Potter symbolize to me?

Boumour and Igan half carried, half walked him into the building, down a narrow hall and into a poorly lighted, gloomy big room with a ceiling that went

up to bare beams two stories above. They dropped him onto a dusty couch - bare plastic and hydraulic contour shapers that adjusted reluctantly. The light came from two glowglobes high up under the beams. It exposed oddments of furniture scattered around the room and mounds of strange shape covered by slick, glistening fabric. A table to his left, he realized, was planks. Wood! A contour cot lay beyond it, and an ancient rolltop desk with a missing drawer, mismatched chairs. A stained, soot-blackened fireplace with an iron crane reaching across its mouth like a gibbet occupied half the wall across from him. The entire room smelled of dampness and rot. The floor creaked as people moved. Wood flooring!

Svengaard looked up at tiny windows admitting a sparse gray daylight that grew brighter by the second. Even at its brightest he knew it wouldn't dispel the gloom of this place. Here was sadness that made him think of people without number — dead, forgotten. Tears rolled down his cheeks.

What's wrong with me? he wondered.

There came a sound from the yard of the van's turbines being ignited. He heard it lift, leave . . . fade away. Harvey and Lizbeth entered the room.

Lizbeth looked at Svengaard, then at Boumour and Igan who had taken up vigil on the cot. With her crouched, protective walk, she crossed to Svengaard, touched his shoulder. She saw his tears, evidence of humanity, and she wished then that he were her doctor. Perhaps there was a way. She decided to ask Harvey.

"We won't harm you. They are the ones who killed your wife and friends, not us."

Svengaard pulled away.

How dare she have pity on me? he thought. But she had reached some chord in him. He could feel himself shattering.

Oppressive silence settled over the room.

Harvey came up, guided his wife to a chair at the table.

"It's wood," she said, touching the surface, wonder in her voice. Then: "Harvey, I'm very hungry."

"They'll bring food as soon as they've disposed of the van," he said.

She clutched his hand, and Svengaard watched, fascinated by the nervous movement of her fingers.

Glisson and the old man returned presently, slamming the door behind them. The building creaked with their movement.

"We'll have a forest patrol vehicle for the next stage," Glisson said. "Much safer. There's a thing you all should know now." The Cyborg moved a cold, weighted stare from face to face. "There was a marker on top of the van's load section which we abandoned last night."

"Marker?" Lizbeth said.

"A device for tracing us, following us," Glisson said.

"Ohhh!" Lizbeth put a hand over her mouth.

"I do not know how closely they were following," Glisson said. "I was altered for this task, and certain of my devices were left behind. They may know where we are right now."

Harvey shook his head. "But why . . ."

"Why haven't they moved against us?" Glisson asked. "It's obvious. They hope we'll lead them to the vitals of our organization." Something like rage came into the Cyborg's features. "It may be we can surprise them."

XXII

In the Survey Room, the great globe's instrumented inner walls lay relatively quiescent. Calapine and Schruille of the Tuyere occupied the triple thrones. The dais turned slowly, allowing them to scan the entire surface. Kaleidoscopic colors from the instruments played a

somnolent visible melody across Calapine's features — a wash of greens, reds, purples.

She felt tired, with a definite emotion of self pity. There was something wrong with the enzymic analyzers. She felt sure of it, wondering if the Underground had somehow compromised the function of the pharmacy computers.

Schruille was no help. He'd laughed at the suggestion.

Allgood's features appeared on a call screen before Calapine. She stopped the turning dais as he bowed, said: "I call to report, Calapine." She noted the dark circles under his eyes, the drugged awareness in the way he held his head stiffly erect.

"You have found them?" Calapine asked.

"They're somewhere in the wilderness area, Calapine," All-good said. "They have to be in there."

"Have to be!" she sneered.
"You're a foolish optimist, Max."

"We know some of the hiding places they could've chosen, Calapine."

"For every one you know, they've nine you don't know," she said.

"I have the entire area ringed, Calapine. We're moving in slowly, checking everywhere as we go. They're there, and we'll find them." "He babbles," she said, glancing at Schruille.

Schruille returned a mirthless smile, looked at Allgood through the prismatic reflector. "Max, have you found the source of the substitute embryo?"

"Not yet, Schruille."

He stared up at them, his face betraying his obvious confusion at the militancy and violence of his Optimen.

"Do you seek in Seatac?" Calapine demanded.

Allgood wet his lips.

"Out with it!" she snapped.

Ahhh the fear in his eyes.

"We're searching there, Calapine, but the . . ."

"You think we were too precipitate?" she asked.

He shook his head.

"You're acting strangely," Schruille said. "Are you afraid of us?"

He hesitated, then: "Yes, Schruille."

"Yes, Schruille!" Calapine mimicked.

Allgood looked at her, the fear in his eyes tempered by anger. "I'm taking every action I know, Calapine."

She marked a sudden precision in his manner behind the anger. Her eyes went wide with wonder. Was it possible? She looked at Schruille, wondering if he had seen it.

"Max, why did you call us?" Schruille asked.

"I . . . to report, Schruille."
"You've reported nothing."

Hesitantly, Calapine brought up her instruments for a special probe of Allgood, stared at the result. Horror mingled with rage in her. Cyborg! They had defiled Max! Her Max!

"There's only need for you to obey us," Schruille said.

Allgood nodded silently.

"You!" Calapine hissed. She leaned toward the screen. "You dared! Why? Why, Max?"

Schruille said: "What . . ."

But in the shocked instant of her questions, Allgood had seen that he was discovered. He knew it was his end, could see it in her eyes. "I saw . . . I found the doppelgangers," he stammered.

An angry twist of her hand rolled one of the rings on her thorne arm. Sonics sent a shock wave chattering across Allgood, blurred his image. His lips moved soundlessly, eyes staring. He collapsed.

"Why did you do that?" Schruille asked.

"He was Cyborg!" she grated and pointed to the evidence of the instruments.

"Max? Our Max?" He looked at the instruments, nodded.

"My Max," she said.

"But he worshipped you, loved you."

"He does nothing now," she whispered. She blanked the screen, continued to stare at it. Already the incident was receding from her mind.

"Do you enjoy direct action?" Schruille asked.

She met his gaze in the reflector. Enjoy direct action? There was indeed a kind of elation in . . . violence.

"We have no Max now," Schruille said.

"We'll waken another doppleganger," she said. "Security can function without him for now."

"Who'll waken the doppel-ganger?" he asked. "Igan and Boumour are no longer with us. The Pharmacist, Hand, is gone."
"What's keeping Nourse?" she asked.

"Enzymic trouble," Schruille said, a note of glee in his voice. "He said something about a necessary realignment of his prescription. Bonellia hormone derivatives, I believe."

"Nourse can awaken the doppelganger," she said. She wondered momentarily then why they needed the doppelganger. Oh, yes. Max was gone.

merely awakening Max's duplicate," Schruille said. "They're not as good as they once were, you know. The new Max must be educated for his

role, fitted into it gently. It could be weeks . . . months."

"Then one of us can run Security," she said.

"You think we're ready for it?" Schruille asked.

"There's a thrill in this sort of decision making," she said. "I don't mind saying I've been deeply bored during the past several hundred years. But now ... now I feel alive, vital, alert, fascinated." She looked up at the glowing banks of scanner eyes, a full band of them, showing their fellow Optimen watching activities in the Survey Room. "And I'm not alone in this."

Schruille glanced up at the glittering arctic circle of the globe's inner wall. "Aliveness," he murmured. "But Max . . . he is dead."

"Any Max can be replaced," she said. She looked at Schruille, turning her head to stare past the prism. "You're very blunt today, Schruille. You've spoken of death twice that I recall."

"Blunt? I?" He shook his head. "But I didn't erase Max."

She laughed aloud. "My own reactions thrill me, Schruille!"

"And do you find changes in your enzymic demands?"

"A few. What is that? Times change. It's part of being. Adjustments must be made."

"Indeed," he said.

"Where'd they find a substitute for the Durant embryo?" she asked, her mind shooting off at a tangent.

"Perhaps the new Max can discover," Schruille said.

"He must."

"Or you will grow another Max," Schruille said.

"Don't mock me, Schruille."

"I wouldn't dare."

Again she looked directly at him.

"What if they produced their own embryo for the substitution?" Schruille asked.

She turned away. "In the name of all that's proper, how?"

"Air can be filtered clean of contraceptive gas," Schruille said.

"You're disgusting!"

"Am I? But haven't you wondered what Potter concealed?"

"Potter? We know what he concealed."

"A person devoted to the prevention of life . . . such as that is," Schruille said. "What did he hide in his mind?"

"Potter is no more."

"But what did he conceal?"

"You think he knew the source of the . . . outside interference?"

"Perhaps. And he would know where to find an embryo."

"Then the record will show the source as you have already said yourself."

"I've been reconsidering."

She stared at him in the prism. "It's not possible."

"That I could reconsider?"

"You know what I mean—what you're thinking."

"But it is possible."

"It isn't!"

"You're being stubborn, Cal. A female should be the last person to deny such a possibility."

"Now, you're being truly disgusting!"

"We know Potter found a self-viable," Schruille pressed. "They could have many self-viables — male and female. We know historically the capabilities of such raw union. It's part of our natural ancestry."

"You're unspeakable," she breathed.

"You can face the concept of death, but not this," Schruille said. "Most interesting."

"Disgusting!" she barked.

"But possible," Schruille said.

"The substitute embryo wasn't self-viable!" she pounced.

"All the more reason they might've been willing to sacrifice it for one that was, eh?"

"Where would they find the vat facilities, the chemicals, the enzymes, the . . ."

"Where they've always been." "What?"

"They've put the Durant embryo back into its mother," Schruille said. "We can be certain of this. Would it not be equally logical to leave the embryo there to begin with—never remove it never isolate the gametes in a vat at all?"

Calapine found herself speechless. She sensed a sour taste in her mouth, realized with a feeling of shock that she wanted to vomit. Something's wrong with my enzyme balance, she thought.

She spoke slowly, precisely: "I am reporting to pharmacy at once, Schruille. I do not feel well."

"By all means," Schruille said. He glanced up and around at the watching scanners: a full circle of them.

Delicately, Calapine eased herself out of her throne, slid down the beam to the lock segment. Before letting herself out, she cast a look up at the dais, faintly remembering. Which Max was erased? she asked herself. We've had many of him . . . a successful model for our Security. She thought of the others, Max after Max after Max, each shunted aside when his appearance began to annoy his masters. They stretched into infinity, images in an endless system of mirrors.

What is erasure to such as Max? she wondered. I am an un-broken continuity of existence. But a doppelganger doesn't remember. A doppelganger breaks the continuity.

Unless the cells remember.

Memory...cells...embryos. She thought of the embryo within Lizbeth Durant. Disgusting, but simple. So beautifully simple. Her gorge began to rise. Whirling, Calapine dropped down to the Hall of Counsel, ran for the nearest pharmacy outlet. As she ran, she clenched the hand that had slain Max and helped destroy a magalopolis.

XXIII

66 Che's sick, I tell you!"

Harvey bent over Igan, shaking him out of sleep. They were in a narrow earth-walled room, ceiling of plasmeld beams, a dim yellow glowglobe in one corner. Sleeping pads were spread against the walls, Boumour and Igan on two of them foot to foot, the bound form of Svengaard on another, two of the pads empty.

"Come quickly!" Harvey pleaded. "She's sick."

Igan groaned, sat up. He glanced at his watch—almost sunset on the surface. They'd crawled in here just before daylight and after a night of laboring on foot up seemingly endless woods trails behind a Forest Patrol guide. Igan still ached from the unaccustomed exercise.

Lizbeth sick?

She'd had three days since the embryo had been placed within

her. The others had healed this rapidly, but they hadn't been subjected to a night of stumbling along the rough forest trails.

"Please hurry," Harvey plead-

ed.

"I'm coming," Igan said. And he thought: Listen to his tone change now that he needs me.

Boumour sat up opposite him,

asked: "Shall I join you?"

"Wait here for Glisson," Igan said.

"Did Glisson say where he was going?"

"To arrange for another guide.

It'll be dark soon."

"Doesn't he ever sleep?" Boumour asked.

"Please!" Harvey begged.

"Yes!" Igan snapped. "What're her symptoms?"

"Vomiting . . . incoherent."

"Let me get my bag." Igan retrieved a thick black case from the floor near his head, glanced across at Svengaard. The man's breathing still showed the even rhythm of the narcotic they'd administered before collapsing into sleep themselves. Something had to be done about Svengaard. He slowed them down.

Harvey pulled at Igan's sleeve. "I'm coming! I'm coming!" Igan said. He freed his arm, followed Harvey through a low hole at the end of the room and into a room similar to the one they'd just vacated. Lizbeth lay on a

pad beneath a single glowglobe across from them. She groaned.

Harvey knelt beside her. "I'm right here."

"Harvey," she whispered. "Oh, Harvey."

Igan joined them, lifted a pulmonometer - sphagnomometer from his bag. He pressed it against her neck, read the dial. "Where do you hurt?" he asked.

"Ohhhh," she moaned.

"Please," Harvey said, looking at Igan. "Please do something."

"Stand out of the way," Igan said.

Harvey stood up, backed off two steps. "What is it?" he whispered.

Igan ignored him, taped an enzymic vampire gauge to Lizbeth's left wrist, read the dials.

"What's wrong with her?" Harvey demanded.

Igan unclipped his instruments, restored them to his bag. "Nothing's wrong with her."

"But she's . . ."

"She's perfectly normal. Most of the others reacted the same way. It's realignment of her enzymic demand system."

"Isn't there some . . ."

"Calm down!" Igan stood up, faced Harvey. "She barely needs any prescription material. Pretty soon, she can do without altogether. She's in better health than you are. And she could walk

into a pharmacy right now. The prescription flag wouldn't even identify her."

"Then why's she . . ."

"It's the embryo. It compensates for her needs and protects itself. Does it automatically."

"But she's sick!"

"A bit of glandular maladjustment, nothing else." Igan picked up his bag. "It's all part of the ancient process. The embryo says produce this, produce that. She produces. Puts a certain strain on her system."

"Can't you do anything for her?"

"Of course I can. She'll be extremely hungry in a little while. We'll give her something to settle her stomach and then feed her. Provided they can produce some food in this hole."

Lizbeth groaned: "Harvey?"

He knelt beside her, clasped her hands. "Yes, dear?"

"I feel terrible."

"They'll give you something in a few minutes."

"Ohhhh."

Harvey turned a fierce scowl up at Igan.

"As soon as we can," Igan said. "Don't worry. This is normal." He turned, ducked out into the other room.

"What's wrong?" Lizbeth whispered.

"It's the embryo," Harvey said. "Didn't you hear?"

"Yes. My head aches."

Igan returned with a capsule and a cup of water, bent over Lizbeth. "Take this. It'll settle your stomach."

Harvey helped her sit up, held her while she swallowed the capsule.

She took a quavering breath, returned the cup. "I'm sorry to be such a . . ."

"Quite all right," Igan said. He looked at Harvey. "Best bring her in the other room. Glisson will return in a few minutes. He should have food and a guide."

Harvey helped his wife to her feet, supported her as they followed Igan into the other room. They found Svengaard sitting up staring at his bound hands.

"Have you been listening?" Igan asked.

Svengaard looked at Lizbeth. "Yes."

"Have you thought about Seatac?"

"I've thought."

"You're thinking of releasing him?" Harvey asked.

"He slows us too much," Igan said. "And we cannot release him."

"Perhaps I should do something about him," Harvey said.

"What do you suggest, Durant?" Boumour asked.

"He's a stanger to us," Harvey said.

"Ahh," Boumour said. "Then we leave him to you."

"Harvey!" Lizbeth said. She wondered if he'd suddenly gone mad. Was this his reaction to her request that they seek Svengaard as her doctor?

But Harvey was remembering Lizbeth's moans. "If it's him or my son," he said, "the choice is easy."

Lizbeth took his hand, signaled: "What're you doing? You can't mean this!"

"What is he, anyway?" Harvey asked, staring at Igan. And he signaled Lizbeth: "Wait. Watch."

She read her husband then, pulled away.

"He's a gene surgeon," Harvey said. His voice dripped scorn. "He's existed for them. Can he justify his existence? He's a non-viable, non-living non-entity. He has no future."

"Is that your choice?" Boumour asked.

Svengaard looked up at Harvey. "Do you talk of murdering me?" he asked. The lack of emotion in his voice surprised Harvey.

"You don't protest?" he asked.

Svengaard tried to swallow.

His throat felt full of dry cotton.

He looked at Harvey, measuring the bulk of the man, the corded

muscles. He remembered the excessive male protectiveness in Harvey's nature, the gene-error that made him a slave to Lizbeth's slightest need.

"Why should I argue," Svengaard asked, "when much of what he says is true and when he's already made up his mind?"

"How will you do it, Durant?"
Boumour asked.

"How would you like me to do it?" Harvey asked.

"Strangulation might be interesting," Boumour said, and Harvey wondered if Svengaard, too, could hear the Cyborg clinical detachment in the man's voice.

"A simple snap of the neck is quicker," Igan said. "Or an injection. I could supply several from my kit."

Harvey felt Lizbeth trembling against him. He patted her arm, disengaged himself.

"Harvey!" she said.

He shook his head, advanced on Svengaard.

Igan retreated to Boumour's side, stood watching.

Harvey knelt behind Svengaard, placed his fingers around the surgeon's throat, bent close to the ear opposite his audience. In a whisper audible only to Svengaard, Harvey said: "They would as soon see you dead. They don't care one way or another. How do you feel about it?"

Svengaard felt the hands on his throat. He knew he could reach up with his bound hands and try to remove those clutching fingers, but he knew he'd fail. There was no doubting Harvey's strength.

"Your own choice?" Harvey

whispered.

"Do it, man!" Boumour called. Only seconds ago, Svengaard realized, he'd been resigned to death, wanted death. Suddenly, that wish was the farthest thing from his desires.

"I want to live," he husked.

"Is that your choice?" Harvey whispered.

"Yes!"

"Are you talking to him?" Boumour asked.

"Why do you want to live?" Harvey asked in a normal voice. He relaxed his fingers slightly, a subtle communication to Svengaard. Even an untrained person could read this.

"Because I've never alive," Svengaard said. "I want to try it."

"But how can you justify your existence?" Harvey asked, allowing his fingers to tighten.

Svengaard looked at Lizbeth, sensing at last the direction of Harvey's thoughts. He glanced at Boumour and Igan.

"You haven't answered my question," Boumour said. "What are you discussing with our prisoner?"

"Are they both Cyborgs?" Svengaard asked.

"Irretrievably," Harvey said. "Without human feelings-or near enough to it that it makes no difference."

"Then how can you trust them with your wife's care?"

Harvey's fingers relaxed.

"That is a way I could justify my existence," Svengaard said.

Harvey removed his hands from Svengaard's throat, squeezed the man's shoulders. It was instant communication, more than words, something that went from flesh to flesh. Svengaard knew he had an ally.

XXIV

Doumour crossed to stand over D them, demanded: "Are you going to kill him or aren't you?"

"No one here's going to kill

him," Harvey said.

"What've you been doing?"

"Solving a problem," Harvey said. He kept a hand on Svengaard's arm. Svengaard found he could understand Harvey's intent just by the pressure of that hand. It said: "Wait. Be still. Let me handle this."

"And what do you intend for our prisoner?" Boumour demanded.

"I intend to free him and put my wife in his care," Harvey said.

Boumour glared at him. "And if that incurs our displeasure?"

"What idiocy!" Igan blared. "How can you trust him when we're available?"

"This is a fellow human," Harvey said. "What he does for my wife will be out of humanity and not like a mechanic treating her as a machine for transporting an embryo."

"This is nonsense!" Igan snapped. But he realized then that Harvey had recognized their Cyborg nature.

Boumour raised a hand to silence him as Igan made to go on. "You have not indicated how you will do this if we oppose it," he said.

"You're not full Cyborgs," Harvey said. "I see fears in you yet and uncertainties. It's new to you, and you're changing. I suspect you're very vulnerable yet."

Boumour backed off three steps, his eyes measuring Harvey. "And Glisson?" Boumour asked.

"Glisson wants only trustworthy allies," Harvey said. "I'm giving him a trustworthy ally."

"How do you know you cah trust Svengaard?" Igan demanded.

"Because you have to ask, you betray your ineffectiveness," Harvey said. He turned, began unfastening Svengaard's fetters.

"It's on your head," Boumour said.

Harvey freed Svengaard's hands, knelt and removed the bindings from his feet.

"I'm going for Glisson," Igan said. He left the room.

Harvey stood up, faced Svengaard. "Do you know about my wife's condition?" he asked.

"I heard Igan," Svengaard said. "Every surgeon studies history and genetic origins. I have an academic knowledge of her condition."

Boumour sniffed.

"There's Igan's medical kit," Harvey said, pointing to the black case on the floor. "Tell me why my wife was sick."

"You're not satisfied with Igan's explanation?" Boumour asked. He appeared outraged by the thought.

"He said it was natural," Harvey said. "How can sickness be natural?"

"She has received medication," Svengaard said. "Do you know what it was?"

"It had the same markings as the pill he gave her in the van," Harvey said. "A tranquilizer he called it then."

Svengaard approached Lizbeth, looked at her eyes, her skin. "Bring the kit," he said, nodding to Harvey. He guided Lizbeth to an empty pad, finding himself fascinated by the idea of this examination. Once he had

thought of this as disgusting; now the idea that Lizbeth carried an embryo in her in the ancient way held only mystery for him, a profound curiosity.

Lizbeth sent a questioning look at Harvey as Svengaard eased her back onto the pad. Harvey nodded reassuringly. She tried to smile, but a strange fear had come over her. The fear didn't originate with Svengaard. His hands were full of gentle assurance. But the prospect of being examined frightened her. She could feel terror warring with the drug Igan had given her.

Svengaard opened the kit, remembering the diagrams and explanations from the study tapes of his school years. They had been the subject of ribald jokes then, but even the jokes helped him now because they tended to fix vital facts in his mind.

"Cling to the wall, for if you fall

"You then must learn to do the crawl!"

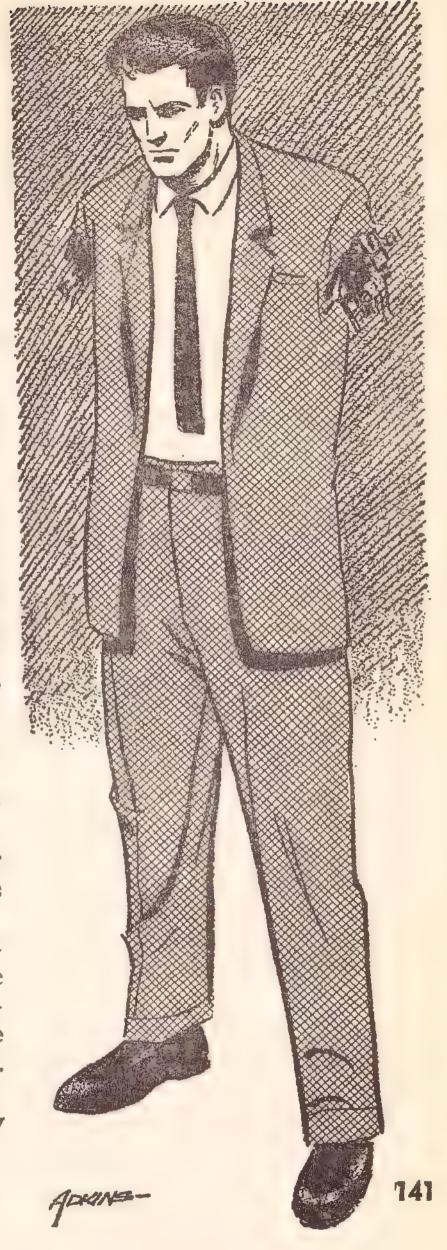
In his memory, he could hear the chant and the uproarious burst of laughter.

Svengaard bent to his examination, excluding all else but the patient and himself. Blood pressure . . . enzymes . . . hormone production . . . bodily secretions.

Presently, he frowned.

"Is something wrong?" Harvey asked.

HEISENBERG'S EYES



Boumour stood, arms folded, behind Harvey. "Yes, do tell us," he said.

"Menstrual hormone complex is much too high," Svengaard said. And he thought: "Cling to the wall . . ."

"The embryo controls these changes," Boumour sneered.

"Yes," Svengaard said. "But why this shift in hormone production?"

"From your superior knowledge, you'll now tell us," Boumour said.

Svengaard ignored the mocking tone, looked up at Boumour. "You've done this before. Have you had any spontaneous abortions in your patients?"

Boumour frowned.

"Well?" Svengaard said.

"A few." He supplied the information grudgingly.

"I suspect the embryo isn't firmly attached to the endometrium," Svengaard said. "To the wall of the uterus," he said, recognizing Harvey's need for explanation. "The embryo must cling to the uterus wall, and this is prepared for by hormones that are present during the menstrual cycle."

Boumour shrugged. "Well, we expect to lose a certain percentage."

"My wife is not a certain percentage," Harvey growled. He turned, focused a glare on Boumour that sent the man retreating three steps.

"But these things happen,"
Boumour said. He looked at
Svengaard, who was preparing a
slapshot ampule from Igan's kit.
"What're you doing?"

"Giving her a little enzymic stimulation to produce the hormones she needs," Svengaard said. He glanced at Harvey, seeing the man's fears and need for reassurance. "It's the best thing we can do now, Durant. It should work if her system hasn't been too upset by all this." He waved a hand indicating their fright, the emotional stress, the exertion.

"Do whatever you think you should," Harvey said.

Svengaard administered the shot, patted Lizbeths arm. "Try to rest. Relax. Don't move around unless it's necessary."

Lizbeth nodded. She had been reading Svengaard, seeing his genuine concern for her. His attempt to reassure Harvey had touched her, but there were fears she couldn't suppress.

"Glisson," she whispered.

Svengaard saw the direction of her thoughts, said: "I won't permit him to move you until I'm sure you're all right. He and his guide will just have to wait."

"You won't permit!" Boumour sneered.

As though to punctuate his words, the ground around them rumbled and shook. Dust puffed through the low entrance, and, like a magicians trick, Glisson materialized there as the concealing dust settled.

At the first sign of disturbance, Harvey had dropped to the floor beside Lizbeth. He held her shoulders, shielded her with his body.

Svengaard still knelt beside the medical kit.

Boumour had whirled to stare at Glisson. "Sonics?" Boumour hissed.

"Not sonics," Glisson said. The Cyborg's usually flat voice carried a singsong twang.

"He has no arms," Harvey said.

They all noticed it then. From the shoulders down, where Glisson's arms had been, now dangled only the empty linkages for Cyborg prosthetic attachments.

"They have sealed us in here," Glisson said. Again that singsong twang, as though something about him had been broken. "As you can see, I am disarmed. Do you not think that amusing? Do you see now why we could never fight them openly? When they wish it, they can destroy anything . . . anyone."

"Igan?" Boumour whispered.
"Igans are easy to destroy,"

Glisson said. "I have seen it. Accept the fact."

"But what'll we do?" Harvey demanded.

"Do?" Glisson looked down at him. "We will wait."

"One of you could stand off an entire Security force to get Potter away," Boumour said. "But all you can do now is wait?"

"Violence is not my function," Glisson said. "You will see."

"What'll they do?" Lizbeth hissed.

"Whatever they wish to do," Glisson said.

XXV

66 There, it is done," Calapine said.

She looked at Schruille and Nourse in the reflectors.

Schruille indicated the kinesthetic analogue relays of the Survey Globe's inner wall. "Did you observe Svengaard's emotion?"

"He was properly horrified," Calapine said.

Schruille pursed his lips, studied her reflection. A session with the pharmacy had restored her composure, but she occupied her throne in a subdued mood. The kaleidoscopic play of lights from the wall gave an unhealthy cast to her skin. There was a definite flush to her features.

Nourse glanced up at the observer lights. The span of arctic wall glowed with a dull red intensity, every position occupied. With hardly an exception, the Optiman community watched developments.

"We have a decision to make," Nourse said.

"You look pale, Nourse," Calapine said. "Did you have pharmacy trouble?"

"No more than you." He spoke defensively. "A simple enzymic heterodyning. It's pretty well damped out."

"I say bring them here now," Schruille said.

"To what purpose?" Nourse asked. "We have the pattern of their flight very well fixed. Why let them escape again?"

"I don't like the thought of unregistered self-viables — who knows how many? — running loose out there," Schruille said.

"Are you sure we could take them alive?" Calapine asked.

"The Cyborg admits ineffectiveness against us," Schruille said.

"Unless that's a trick," Nourse said.

"I don't think so," Calapine said. "And once we have them here we can extract the information we need from their raw brains with the utmost precision."

Nourse turned, stared at her. He couldn't understand what had happened to Calapine. She spoke with the callous brutality of a Folk woman. She was like an awakened ghoul, as though violence were her rising bell.

What is her setting bell? he wondered. And he was shocked at his own thought.

"If they have means of destroying themselves?" Nourse asked. "I remind you of the computer nurse and a sad number of our own surgeons who appeared to be in league with these criminals. We were powerless to prevent their self-destruction."

66 How callous you are, Nourse," Calapine said.

"Callous? I?" He shook his head. "I merely wish to prevent further pain. Let us destroy them ourselves and go on from here."

"Glisson's a full Cyborg," Schruille said. "Can you imagine what his memory banks would reveal?"

"I remember the one who escorted Potter," Nourse said. "Let us take no risk. His quietude could be a trick."

"A contact narcotic in their present cell," Schruille said. "That's my suggestion."

"How do you know it'll work on the Cyborgs?" Nourse asked.

"Then they could escape once more," Schruille said. He shrugged. "What matters it?"

"Into another megalopolis," Nourse said. "Is that it?"

"We know the infection's widespread," Schruille said. "Certainly, there were cells right here in Central. We've cleaned out those, but the . . ."

"I say stop them now!" Nourse snapped.

"I agree with Schruille," Calapine said. "What's the risk?"

"The sooner we stop them the sooner we can return to our own pursuits," Nourse said.

"This is our pursuit," Schruille said.

"You like the idea of sterilizing another megalopolis, don't you, Schruille?" Nourse sneered. "Which one this time? How about Loovil?"

"Once was enough," Schruille said. "But likes and dislikes really have nothing to do with it."

"Let us put it to a vote then," Calapine said.

"Because you're two to one against me, eh?" Nourse said.

"She means a full vote,"
Schruille said. He looked up at
the observation lights. "We've
obviously a quorum."

Nourse stared at the indicators knowing he'd been neatly trapped. He dared not protest a full vote—any vote. And his two companions appeared so sure of themselves. "This is our pursuit."

"We've allowed the Cyborgs to interfere," Nourse said, "because they increased the proportion of viables in the genetic reserve. Did we do this merely to destroy the genetic reserve?"

Schruille indicated a bank of binary pyramids on the globe's wall. "If they endanger us, certainly. But the issue is unregistered self-viables, their possible immunity to the contraceptive gas. Where else could they have produced the substitute embryo?"

"If it comes down to it, we don't need any of them," Calapine said.

"Destroy them all?" Nourse asked. "All the Folk?"

"And raise a new crop of doppelgangers," she said.

"Duplicates don't always come true," Nourse said.

"Nothing limits us," Schruille said.

"Our sun isn't infinite," Nourse said.

need arises," Calapine said. "What problem can defy us? We're not limited by Time."

"Yet we're sterile," Nourse said. "Our gametes refuse to unite."

"And well they do," Schruille said. "I'd not have it otherwise."

"All we wish now is a simple vote," Calapine said. "A simple vote on whether to capture and bring in one tiny band of criminals. Why should that arouse major debate?"

Nourse started to speak, thought better of it. He shook his head, looked from Calapine to Schruille.

"Well?" Schruille asked.

"I think this little band is the real issue," Nourse said. "One Sterrie surgeon, two Cyborgs and two viables."

"And Durant was ready to kill the Sterrie," Schruille said.

"No." It was Calapine. "He wasn't ready to erase anyone." She found herself suddenly interested in the train of Nourse's reasoning. It was his logic and reason, after all, which had always attracted her.

Schruille, seeing her waver, said: "Calapine!"

"We all saw Durant's emotions," Nourse said. He waved at the instrument wall in front of him. "He would've killed no one. He was ... educating Svengaard, talking to Svengaard with his hands."

"As they do between themselves, he and his wife," Calapine said. "Certainly!"

"You say we should raise a new crop of doppelgangers," Nourse said. "Which seed shall we use? The occupants of Seatac, perhaps?"

"We could take the seed cells first," Schruille said, and he wondered how he had been put so suddenly on the defensive. "I say let's vote on it. Bring them here for full interrogation or destroy them."

"No need," Nourse said. "I've changed my mind. Bring them here . . . if you can."

"Then it's settled," Schruille said. He rapped the signal into his throne arm. "You see, it's really very simple."

"Indeed?" Nourse said. "Then why do Calapine and I find ourselves suddenly reluctant to use violence? Why do we long for the old ways when Max shielded us from ourselves?"

XXVI

The Hall of Counsel had not seen such a gathering since the debate over legalizing limited Cyborg experiments on their own kind some thirty thousand years before. The Optimen occupied a rainbow splashing of multicolored cushions on the banks of plasmeld benches. Some appeared nude, but most out of awareness of such a gathering's traditional nature came clothed in garments of their immediate historical whims. There were togas, kilts, gowns and ruffs, three-cornered hats and derbies, G-strings and muumuus, fabrics and styles reaching back into prehistory.

Those who could not jam into the hall watched through half a million scanner eyes that glittered around the upper line of the walls.

It was barely daylight over Central, but not an Optiman slept.

The Survey Globe had been moved aside, and the Tuyere occupied a position on the front bench center at the end of the hall. The prisoners had been brought in on a pneumoflot tumbril by acolytes. They sat on the tumbril's flat surface, immobilized within dull blue plasmeld plastrons that permitted only the shallowest of breaths.

As she looked down on them from her bench, seeing the five figures so rigidly repressed, Calapine permitted herself a faint pity for them. The woman—such terror in her eyes. The rage in Harvey Durant's face. The resigned waiting in Glisson and Boumour. And Svengaard—a look of wary awakening.

Yet Calapine felt something was missing here. She couldn't name the missing thing, felt it only as a negative blankness within herself.

Nourse is right, she thought.
These five are important.

Some Optiman up near the front of the hall had brought a tinkle-player, and its little bell music could be heard above the murmurous whispering of the throng in the hall. The sound appeared to grow louder as the

Optimen quieted in anticipation. The tinkle-player was stilled in mid-melody.

It grew quieter and quieter in the hall.

Despite her fear, Lizbeth stared around her in the growing silence. She had never before seen an Optiman in the fleshonly on the screens of the public announcement system. (In her lifetime it'd been mostly the members of the Tuyere, although older Folk mentioned the Kagiss trio preceding them.) looked so varied and colorfuland so distant. She had the demoralizing feeling that nothing of this moment had happened by chance, that there was a terrifying symmetry in being here, now, with this company.

"They are completely immobilized," Schruille said.
"There's nothing to fear."

"Yet they are terrified," Nourse said. And he recalled suddenly a moment out of his youth. He'd been taken to an antiquary's home, one of the hedonists proudly displaying his plasmeld copies of lost statues. There'd been a giant fish, one headless figure on a horse (very daring, that), a hooded monk and a man and woman clasped in a mutual embrace of terror. The man and woman, he realized now, had been recalled by

the faces of Lizbeth and Harvey Durant.

They are, in a way, our parents, Nourse thought. We spring from the Folk.

Calapine realized abruptly what it was she missed here. There was no Max. He was gone, she knew, and she wondered momentarily what had happened to him. Outgrew his usefulness, she decided. The new Max must not be ready yet.

Odd that Max should go just like that, she thought. But the lives of the Folk were like gossamer. One day you saw them; the next day you saw through the place where they had been. I must ask what happened to Max. But she knew she wouldn't ever get around to that. The answer might require a disgusting word, a concept where even euphemisms would be repellent.

"Pay particular attention to the Cyborg Glisson," Schruille said. "Isn't it strange that our instruments reflect no emotions from him?"

"Perhaps he has no emotions," Calapine said.

"Hah!" Schruille barked.
"Very good."

"I don't trust him," Nourse said. "My grandsir spoke of Cyborg tricks."

"He's virtually a robot," Schruille said. "Programmed to respond with the closest precise answer to preserve his being. His present docility is interesting."

"Isn't it our purpose to interrogate them?" Nourse asked.

"In a moment," Schruille said.
"We will peel them down to the
raw brain and open their memories to our examination. First,
it is well to study them."

"You're so callous, Schruille," Calapine said.

A murmurous agreement spread upward through the hall.

Schruille glanced at her. Calapine's voice had sounded so strange then. He found himself filled with a sudden disquiet.

Glisson's Cyborg eyes moved, heavy-lidded, coldly probing, glistening with their lensed alterations that expanded his spectrum of visibility.

"Do you see it, Durant?" he asked, his voice chopped into bits by short breaths.

Harvey found his voice. "I... can't... be ... lieve ... it."

"They are talking," Calapine said, her voice bright. She looked at the Durant male, surprised by a look of loathing and pity in his eyes.

Pity? she wondered.

A glance at the tiny repeater bracelet on her wrist confirmed the assessment of the Survey Globe. Pity. Pity! How dare he pity me!

"Har . . . vey," Lizbeth whispered.

Frustrated rage contorted Harvey's face. He moved his eyes, could not quite swing them far enough to see her. "Liz," he muttered. "Liz, I love you."

"This is a time for hate, not love," Glisson said, his detached tone giving the words an air of unreality. "Hate and revenge," Glisson said.

"What are you saying?" Svengaard asked. He'd listened with mounting amazement to their words. For a time he'd thought of pleading with the Optimen that he'd been a prisoner, held against his will, but a sixth sense told him the attempt would be useless. He was nothing to these lordly creatures. He was foam in the backwash of a wave at a cliff base. They were the cliff.

"Look at them as a doctor," Glisson said. "They are dying." "It's true," Harvey said.

Lizbeth had pressed her eyes closed against tears. Now her eyes sprang open, and she stared up at the people around her, seeing them through Harvey's eyes and Glisson's.

"They are dying," she breathed.

It was there for the trained eyes of an Underground courier to read. Mortality on the faces of the immortals! Glisson had seen it, of course, through his Cyborg abilities to see and respond, read and reflect.

"The Folk are so disgusting at times," Calapine said.

"They can't be," Svengaard said. There was an unreadable tone in his voice, and Lizbeth wondered at it. The voice lacked the despair she could have expected.

"I say they are disgusting!" Calapine intoned. "No mere pharmacist should contradict me."

Boumour stirred out of a profound lethargy. The as yet alien computer logic within him had recorded the conversation, replayed it, derived corollary meanings. He looked up now as a new and partial Cyborg, read the subtle betrayals in Optiman flesh. The thing was there! Something had gone wrong with the live-forevers. The shock of it left Boumour with a half-formed feeling of emptiness, as though he ought to respond with some emotion for which he no longer had the capacity.

"Their words," Nourse said. "I find their conversation mostly meaningless. What is it they're saying, Schruille?"

"Let us ask them now about the self-viables," Calapine said. "And the substitute embryo. Don't forget the substitute embryo."

cok up there in the top row," Glisson said. "The

tall one. See the wrinkles on his face?"

"He looks so old," Lizbeth whispered. She felt a curiously empty feeling. As long as the Optimen were there — unchangeable, eternal — her world contained a foundation that could never tremble. Even as she'd opposed them, she'd felt this. Cyborgs died . . . eventually. The Folk died. But Optimen went on and on and on . . .

"What is it?" Svengaard asked. "What's happening to them?"

"Second row on the left," Glisson said. "The woman with red hair. See the sunken eyes, the stare?"

Boumour moved his eyes to see the woman. Flaws in Optiman flesh leaped out as his gaze traversed the short arc permitted him.

"What're they saying?" Calapine demanded. "What is this?" Her voice sounded querulous even to her own ears. She felt fretful, annoyed by vague aches.

A muttering sound of discontent moved upward through the benches. There were little pockets of giggling and bursts of peevish anger, laughter.

We're supposed to interrogate these criminals, Calapine thought. When will it start? Must I begin it?

She looked at Schruille. He had scrunched down in his seat,

glaring at Harvey Durant. She turned to Nourse, encountered a supercilious half-smile on his face, a remote look in his eyes. There was a throbbing at Nourse's neck she had never noticed before. A mottled patch of red veins stood out on his cheek.

They leave everything to me, she thought.

XXVII

With a fretful movement of her shoulders, she touched her bracelet controls. Lambent purple light washed over the giant globe at the side of the hall. A beam of the light spilled out from the globe's top as though decanted onto the floor. It reached toward the prisoners.

Schruille watched the play of light. Soon the prisoners would be raw, shrieking creatures, he knew, spilling out all their knowledge for the Tuyere's instruments to analyze. Nothing would remain of them except nerve fibers along which the burning light would spread, drinking memories, experiences, knowledge.

"Wait," Nourse said.

He studied the light. It had stopped its reaching movement toward the prisoners at his command. He felt they were making some gross error known only to himself, and he looked around the abruptly silent hall wondering if any of the others could identify the error or speak it. Here was all the secret machinery of their government, everything planned, ordained. Somehow, the inelegant unexpectedness of naked Life had entered here. It was an error.

"Why do we wait?" Calapine asked.

Nourse tried to remember. He knew he had opposed this action. Why?

Pain!

"We must not cause pain," he said. "We must give them the chance to speak without duress."

"They've gone mad," Lizbeth whispered.

"And we've won," Glisson said.
"Through my eyes, all my fellows can see — we've won."

"They're going to destroy us," Bourmour said.

"But we've won," Glisson said.
"How?" Svengaard asked. And
louder: "How?"

"We offered them Potter as bait and gave them a taste of violence," Glisson said. "We knew they'd look. They had to look."

"Why?" Svengaard whispered.
"Because we've changed their
environment," Glisson said. "Little things, a pressure here, a
shocking Cyborg there. And we
gave them a taste for war."

"How?" Svengaard asked.

"Instinct," Glisson said. The word carried a computed finality, a sense of inhuman logic from which there was no escape. "War's an instinct with humans. Battle. Violence. But their systems have been maintained in delicate balance for so many thousands of years. Ah, the price they paid - tranquility, detachment, boredom. Comes now violence with its demands, and their ability to change has atrophied. They're heterodyning, swaying farther and farther from that line of perpetual life. Soon they'll die."

"War?" Svengaard had heard the stories of the violence from which the Optimen preserved the Folk. War. "It can't be," he said. "There's some new disease or ..."

"I have stated the fact as computed to its ultimate decimal of logic," Glisson said.

Calapine screamed: "What're they saying?"

She could hear the prisoners' words distinctly, but their meaning eluded her. They were speaking obscenities. She heard a word, registered it, but the next word replaced it in her awareness without linkage. There was no intelligent sequence. Only obscenities. She rapped Schruille's arm. "What are they saying?"

"Soon we shall question them and discover," Schruille said.

"Yes," Calapine said. "The very thing."

"How is it possible?" Svengaard breathed. He could see two couples dancing on the benches high up at the back of the hall. There were couples embracing, making love. Two Optimen began shouting at each other on his right — nose to nose. Svengaard felt that he was watching buildings fall, the earth open and spew forth flames.

"Watch them!" Glisson said.
"Why can't they just compensate for this . . . change?" Svengaard demanded.

"Their ability to compensate is atrophied," Glisson said. "And you must understand that compensation itself is a new environment. It creates even greater demands. Look at them! They're oscillating out of control right now."

"Make them shut up!" Calapine shouted. She leaped to her feet, advanced on the prisoners.

Harvey watched, fascinated, terrified. There was a disjointed quality in her movement, in every response — except her anger. Rage burned at him from her eyes. A violent trembling swept through his body.

"You!" Calapine said, pointing at Harvey. "Why do you stare at me and mumble? Answer!"

Harvey found himself frozen

in silence, not by his fear of her anger, but by a sudden over-whelming awareness of Calapine's age. How old was she? Thirty thousand years? Forty thousand? Was she one of the originals — eighty thousand or more years old?

"Speak up and say what you will," Calapine commanded. "I, Calapine, order it. Show honor now, and perhaps we will be lenient."

Harvey stared, mute. She seemed unaware of the growing uproar all around.

"Durant," Glisson said. "You must remember there are subterranean things called instincts which direct destiny with the inexorable flow of a river. This is change. See it around us. Change is the only constant."

"But she's dying," Harvey said.

Calapine couldn't make sense of his words, but she found herself touched by the tone of concern for her in his voice. She consulted her bracelet linkage with the globe. Concern! He was worried about her, about Calapine, not about himself or his futile mate!

She turned into an oddly enfolding darkness, collapsed full length on the floor with her arms outstretched toward the benches.

A mirthless chuckle escaped Glisson's lips.

"We have to do something for them," Harvey said. "They have to understand what they're doing to themselves!"

Schruille stirred suddenly, looked up at the opposite wall, saw dark patches where scanners had been deactivated, abandoned by the Optimen who couldn't jam into the hall. He felt an abrupt alarm at the eddies of movement in the crowd all around. Some of the people were leaving — swaying, drifting, running, laughing, gigging . . .

But we came to question the prisoners, Schruille thought.

The hysteria in the hall slowly impressed itself on Schruille's senses. He looked at Nourse.

Nourse sat with eyes closed, mumbling to himself. "Boiling oil," Nourse said. "But that's too sudden. We need something more subtle, more enduring."

Schruille leaned forward. "I have a question for the man Harvey Durant."

"What is it?" Nourse asked. He opened his eyes.

"What did he hope to gain by his actions?" Schruille asked.

"Very good," Nourse said.

"Answer the question, Harvey
Durant."

Nourse touched his own bracelet. The purple beam of light inched closer to the prisoners.

"I didn't want you to die," Harvey said. "Not this."

"Answer the question!" Schruille blared.

Harvey swallowed. "I wanted to . . . "

"We wanted to have a family," Lizbeth said. She spoke clearly, reasonably. "That's all. We wanted to be a family." Tears started in her eyes, and she wondered then what her child would have been like. Certainly, none of them were going to survive this madness.

"What is this?" Schruille asked. "What is this family nonsense?"

"Where did you get the substitute embryo?" Nourse asked. "Answer, and we may be lenient." Again the burning light moved toward the prisoners.

"We have self-viables immune to the contraceptive gas," Glisson said. "Many of them."

"You see?" Schruille said. "I told you so."

"Where are these self-viables?" Nourse asked. He felt his right hand trembling.

"Right under your noses," Glisson said. "Scattered through the population. And don't ask me to identify them. I don't know them all. No one does."

"None will escape us," Schruille said.

"None!" Nourse echoed.

"If we must," Schruille said, "we'll sterilize all but Central and start over."

over?" Glisson asked.

"What?" Schruille screamed the word at the Cyborg.

"Where will you find the genetic pool from which to start over?" Glisson asked. "You are sterile — and terminating."

"We need but a cell to duplicate the original," Schruille said, his voice sneering.

"Then why haven't you duplicated yourselves?" Glisson asked.

"You dare question us?"
Nourse demanded.

"I will answer for you then," Glisson said. "You've not chosen duplication because the doppel-ganger is unstable. The trend of the duplicates is downward—extinction."

Calapine heard scattered words - "Sterile . . . terminating : . . unstable . . . extinction . . ." They were hideous words that crept down into the depths where she lay watching a string of fat sausages parade in glowing order before her awareness. They were like seeds with a lambent radiance moving against a background of oiled black velvet. Sausages. Seeds. She saw them then not precisely as seeds, but as encapsulated life - walled in, shielded, bridging a period unfavorable to life. It made the idea of seeds less repellent to her. They were life.

"We don't need the genetic pool," Schruille said.

Calapine heard his voice clearly, felt she could read his
thoughts. Words out of one of
the glowing sausages forced
themselves upon her: We have
our millions in Central. We are
enough by ourselves. Feeble,
short-lived Folk are a disgusting
reminder of our past. They are
pets, and we no longer need pets.

"I've decided what we can do
to these criminals," Nourse said.
He spoke loudly to force his
voice over the growing hubub
in the hall. "We will apply nerve
excitation a micron at a time.
The pain will be exquisite and
can be drawn out for centuries."

"But you said you didn't want to cause pain," Schruille shouted.

"Didn't I?" Nourse's voice sounded worried.

I don't feel well, Calapine thought. I need a long session in the pharmacy. Pharmacy. The word was a switch that turned on her consciousness. She felt her body stretched out on the floor, pain and wetness at her nose where it had struck the floor in her fall.

"Your suggestion contains some merit, however," Schruille said. "We could restore the nerves behind our ministrations and carry on the punishment indefinitely. Exquisite pain forever!"

"A hell," Nourse said. "Appropriate."

"They're insane enough to do it," Svengaard rasped. "How can we stop them?"

"Glisson!" Lizbeth said. "Do something!"

But the Cyborg remained silent.

frhis is something you didn't anticipate, isn't it, Glisson?" Svengaard said.

Still the Cyborg held to silence. "Answer me!" Svengaard grated.

"They were just suppose to die," Glisson said, voice dispassionate.

"But now they could sterilize all the earth except Central and go on in their madness by themselves," Svengaard said. "And we could be tortured forever!"

"Not forever," Glisson said.
"They're dying."

A cheer went up from the Optimen at the rear of the hall. None of the prisoners could turn to see what had aroused the sound, but it added a new dimension to the sense of urgency around them.

Calapine lifted herself from the floor. Her nose and mouth throbbed with pain. She turned toward the tumbril, saw a commotion among the Optimen beyond it. They were leaping on benches to watch some excited activity

hidden in their midst. A naked body lifted suddenly above the throng, turned over and went down again with a sodden thump. Again a cheer shook the hall.

What're they doing? Calapine wondered. They're hurting each other — themselves!

She wiped a hand across her nose and mouth, looked at the hand. Blood. She could smell it now, a tantalizing smell. Her own blood. It fascinated her. She crossed to the prisoners, showed the hand to Harvey Durant.

"Blood," she said. She touched her nose. Pain! "It hurts," she said. "Why does it hurt, Harvey Durant?" She stared into his eyes. Such sympathy in his eyes. He was human. He cared.

Harvey looked at her, their eyes almost level because of the tumbril's position above the floor. He felt a profound compassion for her suddenly. She was Lizbeth; she was Calapine; she was all women. He saw the concentrated intensity of her attention, the here-now awareness which excluded everything except her need for his words.

"It hurts me, too, Calapine," he said, "but your death would hurt me more."

XXVIII

For an instant, Calapine thought the hall had grown

still around her. She realized then that the noises of the throng continued unabated. She could hear Nourse chanting: "Good! Good!" and Schruille saying: "Excellent! Excellent!"

She realized then that she had been the only one to hear Durant's hideous words. It was blasphemy. She'd lived thousands of years suppressing the very concept of personal death. It could not be said or conceived in the mind. But she had heard the words! She wanted to turn away, to believe those words had never happened. But something of the attention she had focused on Harvey Durant held her chained to his meaning. Only minutes ago, she had been where the seed of life spanned the eons. She had felt the wild presence of forces that could move within the mitochondrial structures of the cells.

"Please," Lizbeth whispered.
"Free us. You're a woman. You
must have some compassion.
What have we done to harm
you? Is it wrong to want love
and life? We didn't want to harm
you."

Odd flickerings of heat and chill surged through her body.

She heard another cheer from the crowd in the far benches. She felt her own sickness and growing awareness of the cul de sac in which she had been trapped. Anger suffused her. She bent to the tumbril's controls, punched a button beneath Glisson.

The carapaces of the shell which held the Cyborg began closing. Glisson's eyes opened wide. A rasping moan escaped him. Calapine giggled, punched another button on the controls. The shells snapped to their former position. Glisson gasped.

She turned to the controls beneath Harvey, poised a finger over the buttons. "Explain your disgusting breach of manners!"

Harvey remained frozen in silence. She was going to crush him!

Svengaard began to laugh. He knew his own position, the first-class second-rater. Why had he been chosen for this moment — to see Glisson and Boumour without words, Nourse and Schruille babbling on their bench, the Optimen in little knots and eddies of mad violence, Calapine ready to kill her prisoners and doubtless forget it ten seconds later? His laughter went out of control.

"Stop that laughing!" Calapine screamed.

Svengaard trembled with hysteria. He gasped for breath. The

shock of her voice helped him gain a measure of control, but it still was immensely ludicrous.

"Fool!" Calapine said. "Explain yourself."

Svengaard stared at her. He could feel only pity now. He remembered the sea from the medical resort at Lapush and he thought he saw now why the Optimen had chosen this place so far from any ocean. Instinct. The sea produced waves, surf—constant reminder that they had set themselves against eternity's waves. They could not face that.

"Answer me," Calapine said. Her hand hovered above his shell's controls.

Svengaard could only stare at her and at the Optimen in their madness beyond her. They stood exposed before him as though their bodies had been opened to spill twisting entrails on the floor.

They have souls with only one scar, Svengaard thought.

It was carved on them day by day, century by century, eon by eon — the increment of panic that their blessed foreverness might be illusion, that it might after all have an ending. He had never before suspected the price the Optimen paid for infinity. The more of it they possessed, the greater its value. The greater the value, the greater the fear of

losing it. The pressure went up and up . . . forever.

But there had to be a breaking point. The Cyborgs had seen this but had missed the real consequences.

The Optimen had themselves hemmed in with euphemisms. They had pharmacists, not doctors. Because doctors meant sickness and injury, and that equalled the unthinkable. They had only their pharmacy and its countless outlets never more than a few steps from any Optiman. They never left Central and its elaborate safeguards. They existed as perpetual adolescents in their nursery prison.

"So you won't speak," Calapine said.

"Wait," Svengaard said as her hand moved toward the buttons beneath him. "When you've killed all the viables and only you remain, when you see yourselves dying one by one, what then?"

"You think to question an Optiman whose experience of life makes yours no more than that!" She snapped her fingers.

He looked at her bruised nose, the blood.

"A Sterrie whose constitution will accept the enzyme adjustment for infinite life . . . until destruction comes from within. I think you want to die."

Calapine drew herself up, glared at him. As she did, she became aware of a sudden odd silence in the hall. She swept a glance around her, saw intent watchfulness in every eye focused upon her. Realization came slowly. They see the blood on my face.

"You had infinite life," Svengaard said. "Does that make you
necessarily more brilliant, more
intelligent? No. You merely
lived longer, had more time for
experience and education. Very
likely, most of you are educated
beyond your intelligence, else
you'd have seen long ago that
this moment was inevitable—
the delicate balance destroyed,
all of you dying."

Calapine took a step backward. His words were like painful knives burning into her nerves.

"Look at you!" Svengaard said. "All of you sick. What does your precious Pharmacy do? I knew without being told: it prescribes wider and wider variant prescriptions, more frequent dosages. It's trying to check the oscillations because that's how it's programmed. It'll go on trying as long as you permit it . . . but it won't save you."

Someone screamed behind her: "Silence him!"

The cry was taken up around

the hall, a deafening chant, foot stamping, hands pounding: "Si-lence him!

Calapine pressed her hands to her ears. She could still feel the chant through her skin. And now she saw Optimen start down off the benches toward the prisoners. She knew bloody violence was only a heartbeat away.

They stopped.

She couldn't understand why and dropped her hands away from her ears. Screams rained down on her. The names of half-forgotten deities were invoked. Eyes stared at something on the floor at the head of the hall.

Calapine whirled, saw Nourse writhing there, foamy spittle around his mouth. His skin was a mottled reddish purple and yellow. Clawed hands reached out, scraped the floor.

"Do something!" Svengaard shouted. "He's dying!" Even as he shouted, he felt the strangeness of his words. Do something! His medical training surfaced and spoke no matter what happened.

Calapine backed away, put out her hands in a warding gesture as old as witchcraft. Schruille leaped up, stood on the bench where he'd been sitting. His mouth moved soundlessly.

"Calapine," Svengaard said.
"If you won't help him, release
me so I can do it."

She leaped to obey, filled with gratitude that she could give this hideous responsibility to another.

The restraining shells fell away at her touch. Svengaard leaped down, almost fell. His legs and arms tingled from the long confinement. He limped toward Nourse, his eyes and mind working as he moved. Mottled yellow in the skin — most probably an immune reaction to pantothenic acid and a failure of adrenalin suppression.

The red triangle of a Pharmacy outlet glowed on the wall at his left above the benches. Svengaard stooped, picked up Nourse's writhing form, began climbing toward the symbol. The man was a sudden dead weight in his arms, no movement except a shallow lifting of the breast.

Optimen fell back from him as though he carried plague. Abruptly, someone above him shouted: "Let me out!"

The mob turned away. Feet pounded on the plasmeld. They jammed up at the exits, clawed and climbed over one another. There were screams, curses, hoarse shouts. It was like a cattle pen with a predator loose in the midst of the animals.

Part of Svengaard's awareness registered on a woman at his right. He passed her. She lay stretched across two banks of seats, her back at an odd angle, mouth gaping, eyes staring, blood on her arms and neck. There was no sign of breath. He climbed past a man who dragged himself up the tiered benches, one leg useless, his eyes intent on an exit sign and a doorway which appeared to be filled with writhing shapes.

Svengaard's arms ached from his load. He stumbled, almost fell up the last two steps as he eased Nourse to the floor beside the Pharmacy outlet.

There were voices down behind him now — Durant and Boumour shouting to be released.

Later, Svengaard thought. He put his hand to the door control on the Pharmacy outlet. The doors refused to open. Of course, he thought. I'm not an Optiman. He lifted Nourse, put one of the Optiman's hands to the control. The doors slid aside. Behind them lay what appeared to be the standard presentation of a priority rack — pyrimidines, aneurin.

Aneurin and inositol, he thought. Got to counteract the immune reaction.

A familiar flow-analysis board occupied the right side, with a gap for insertion of an arm and the usual vampire needles protruding from their gauges. Svengaard tripped the keys on the master flow gauge, opened the

panel. He traced back the aneurin and inositol feeders, immobilized the others, thrust Nourse's arm beneath the needles. They found veins, dipped into flesh. Gauges kicked over.

Svengaard pinched off the return line to stop feedback. Again the gauges kicked over.

Gently, Svengaard disengaged Nourse's arm from the needles, stretched him on the floor. His face was now a uniform pale white, but his breathing had deepened. His eyelids flickered. His flesh felt cold, clammy.

Shock, Svengaard thought. He removed his own jacket, put it around Svengaard, began massaging the arms to restore circulation.

Calapine came into view on his right, sat down at Nourse's head. Her hands were clasped tightly together, knuckles white. There was an odd clarity in her face, the eyes with a look of staring into distances. She felt she had come a much farther distance than up from the floor of the hall, drawn by memories that would not be denied. She knew she had gone through madness into an oddly detached sanity.

The red ball of the Survey Globe caught her eye, the egg of enormous power that did her bidding even now. She thought about Nourse, her many-times playmate. Playmate and toys.

"Will he die?" she asked. She turned to watch Svengaard.

"Not immediately," Svengaard said. "But that final burst of hysteria . . . he's done irreparable damage to his system."

He grew aware that there were only muted moans and a very few controlled commands in the hall now. Some of the acolytes had rallied to help.

"I released Boumour and the Durants and sent a plea for more . . . medical help," Calapine said. "There are a number of . . . dead . . . many injured."

Dead, she thought. What an odd word to apply to an Optiman. Dead . . . dead . . . dead . . .

She felt then how necessity had forced her into a new kind of living awareness, a new rhythm. It had happened down there in a burst of memories that trailed through forty thousand years. None of it escaped her—not a moment of kindness nor of brutality. She remembered all the Max Allgoods, Seatac . . . every lover, every toy . . . Nourse.

Svengaard glanced around at a shuffling sound, saw Boumour approaching with a woman limp in his arms. There was a blue bruise across her cheek and jaw. Her arms hung like sticks.

"Is this Pharmacy outlet available?" Boumour asked. His voice held that chilled Cyborg quality,

but there was shock in his eyes and a touch of horror.

"You'll have to operate the board manually," Svengaard said.
"I keyed out the demand system, jammed the feedback."

Boumour stepped heavily around him with the woman. How fragile she looked. A vein pulsed thickly at her neck.

"I must concoct a muscle relaxant until we can get her to a hospital," Boumour said. "She broke her own arms — contramuscular strain."

Calapine recognized the face, remembered they had disputed mildly about a man once — about a playmate.

Svengaard moved to Nourse's right arm, continued massaging. The move brought the floor of the hall into view and the tumbril. Glisson sat impassively armless in his restraining shell. Lizbeth lay at one side with Harvey kneeling beside her.

"Mrs. Durant!" Svengaard said, remembering his obligation.

"She's all right," Boumour said. "Immobilization for the past few hours was the best thing that could've happened to her."

Best thing! Svengaard thought.

Durant was right: these Cyborgs

are as insensitive as machines.

"Si-lence him," Nourse whispered.

Svengaard looked down at the pale face, saw the broken veins

in the cheeks, the sagging, unresponsive flesh. Nourse's eyelids flickered open.

"Leave him to me," Calapine said.

Nourse moved his head, tried to look at her. He blinked, having obvious trouble focusing. His eyes began to water.

Calapine lifted his head, slid under him until he rested on her lap. She began stroking his brow.

"He used to like this," she said. "Go help the others . . . doctor."

"Cal," Nourse said. "Oh, Cal... I... hurt."

XXIX

Glisson asked. "I don't understand you, Boumour. Your actions aren't logical. What use is it to help them?"

He looked up through the open segment of the Survey globe at Calapine sitting alone on the dais of the Tuyere. The lights of the interior played a slow rhythm across her face. A glowing pyramid of projected binaries danced on the air in front of her.

Glisson had been released from his shell of restraint, but he still sat on the tumbril, his arm connections dangling empty. A medicouch had been brought in for Lizbeth Durant. She lay on it, with Harvey seated beside her. Boumour stood with his back to Glisson looking up into the globe. His fingers moved nervously, clenching, opening. There was a streak of dried blood down his right sleeve. The elfin face held a look of puzzlement.

Svengaard came in from behind the globe, a slowly moving figure in the red shadows. Abruptly, the hall glared with light. The main globes had gone on automatically as darkness fell outside. Svengaard stopped to check Lizbeth, patted Harvey's shoulder. "She will be all right. She's strong."

Lizbeth's eyes followed him as he moved around to look into the Survey Globe. Svengaard's shoulders sagged with fatigue, but there was a look of elation in his face. He was a man who'd found himself.

"Calapine," Svengaard said, "that was the last of them going out to hospitals."

"I see it," she said. She looked up at the scanners, every one lighted. Something more than half of the Optimen were under restraint — mad. Thousands had died. More thousands lay sorely injured. Those who remained watched their globe. She sighed, wondering at their thoughts, wondering how they faced the fact that all had fallen from the tight wire of immortality. Her own emotions confused her.

There was an odd feeling of relief in her breast.

"What of Schruille?' she asked.

"Crushed at a door," Svengaard said. "He's . . . dead."

She sighed. "And Nourse?" "Responding to treatment."

On't you understand what's happened to you?"
Glisson demanded. His eyes glittered as he stared up at Calapine.

Calapine looked down at him, spoke clearly: "We've undergone an emotional stress that has altered the delicate balance of our metabolism." she said. "You tricked us into it. The evidence is quite clear — there's no turning back."

"Then you understand," Glisson said. "Any attempt to force your systems back into the old forms will result in boredom and a gradual descent into apathy."

Calapine smiled. "Yes, Glisson. We'd not want that. We've been addicted to a new kind of ... aliveness that we didn't know existed."

"Then you do understand," Glisson said, and there was a grudging quality to his voice.

"We broke the rhythm of life," Calapine said. "All life is immersed in rhythm, but we got out of step. I suppose that was the outside interference in those

embryos — rhythm asserting itself."

"Well then," Glisson said, "the sooner you can turn things over to us, the sooner things will settle down into . . ."

"To you?" Calapine asked scornfully. She looked out into the quick contrasts of the hall's glaring light. How black and white it all was. "I'd sooner condemn us all," she said.

"But you're dying!"

"So are you," Calapine said.

Svengaard swallowed. He could see that the old animosities would not be suppressed easily. And he wondered at himself, a second-rate surgeon who had suddenly found himself as a doctor, ministering to people who needed him. Durant had seen that — the need to be needed.

"I may have a plan we could accept, Calapine," Svengaard

"To you we will listen," Calapine said, and there was affection in her voice. She studied Svengaard as he searched for words, remembering that this man had saved the lives of Nourse and many others.

We made no plans for the unthinkable, she thought. Is it possible that this nobody who was once a target for kindly sneers can save us? She dared not let herself hope.

"The Cyborgs have techniques

for bringing the emotions into a more or less manageable stasis," Svengaard said. "Once that's done, I believe I know a way to dampen the enzymic oscillations in most of you."

Calapine swallowed. The scanner-eye lights above her began to flash as the watchers
signaled for her to let them into
the communications channels.
They had questions, of course.
She had questions of her own,
but she didn't know that she
could speak them. She caught a
reflection of her own face in one
of the prisms, was reminded of
the look in Lizbeth's eyes as the
woman had pleaded from the
tumbril.

"I can't promise infinite life," Svengaard said, "but I believe many of you can have many more thousands of years."

"Why should we agree to help them?" Glisson demanded. There was a measuring quality in her voice, a hint of the querulous.

"You're failures, too!" Svengaard said. "Can't you see that?" He realized he had shouted with the full power of his disillusionment.

"Don't shout at me!" Glisson snapped.

So they do have emotions, Svengaard thought. Pride . . . anger . . .

"Are you still suffering under

the delusion that you're in control of this situation?" Svengaard asked. He pointed to Calapine. "That one woman up there could still exterminate every non-Optiman on earth."

"Listen to him, you Cyborg fool!" Calapine said.

"Let's not be too free with that word fool," Svengaard said. He stared up at Calapine.

"Watch your tongue, Svengaard," Calapine said. "Our patience is not infinite."

"Nor is your gratitude, eh?" Svengaard said.

A bitter smile touched her mouth. "We were talking about survival," she said.

Svengaard sighed. He wondered then if the patterns of thought conditioned by the illusion of infinite life could ever be truly broken. She had spoken there like the old Tuyere. But her resiliency had surprised him before.

The outburst had touched Harvey's fears for Lizbeth. He glared at Svengaard and Glisson, tried to control his terror and rage. This hall awed him with its immensity and its remembered bedlam. The globe towered over him, a monstrous force that could crush them.

"Survival, then," Svengaard said.

"Let us understand each other," Calapine said. "There are

those among us who will say that your help was merely our due. You are still our captives. There are those who'll demand you submit and reveal your entire Underground to us."

"Yes, let us understand each other," Svengaard said. "Who are your prisoners? Myself, a person who was not a member of the Underground and knows little about it. You have Glisson, who knows more, but assuredly not all. You have Boumour, one of your escaped pharmacists, who knows even less than Glisson. You have the Durants, whose knowledge probably goes little beyond their own cell group. What will you gain even if you milk us dry?"

"Your plan to save us," Calapine said.

"My plan requires cooperation, not coercion," Svengaard said.

"And it will only give us a continuation, not restore us to our original condition, is that it?" Calapine asked.

"You should welcome that," Svengaard said. "It would give you a chance to mature, become useful." He waved a hand to indicate their surroundings. "You've frozen yourselves in immaturity here! You've played with toys! I'm offering you a chance to live!"

Is that it? Calapine wondered.
Is this new aliveness a bypro-

duct of the knowledge that we must die?

"I'm not at all sure we'll cooperate," Glisson said.

Harvey had had enough. He leaped to his feet, glared at Glisson. "You want the human race to die, you robot! You! You're another dead end!"

"Prattle!" Glisson said.

"Listen," Calapine said. She began sampling the communications channels. Bits of sentences poured out into the hall —

"We can restore enzymic balance with our own resources!"
... "Eliminate these creatures!"
... "What's his plan? What's his plan?"
... "Begin the sterilization!"
... his plan?"
... "How long do we have if ..."
"There's no doubt we can ..."

Calapine silenced the voices with a flick of a switch. "It will be put to a vote," she said. "I remind you of that."

"You will die, and soon, if we don't cooperate," Glisson said. "I want that fully understood."

"You know Svengaard's plan?" Calapine asked.

"His thought patterns are transparent," Glisson said.

"I think not," Calapine said.
"I saw him work on Nourse. He manipulated a dispensary to produce a dangerous overdose of aneurin and inositol. Remembering that, I ask myself how many

of us will die in the attempt to arrest this process we can all feel within ourselves. Would I have risked such an overdose upon myself? How does this relate to the excitement we feel? Will any of us, having tasted excitement, wish to sink back into a non-emotional . . . boredom?" She looked at Svengaard. "These are some of my questions."

"I know his plan," Glisson sneered. "Quell your emotions and implant an enzymic dispensary within each of you. Make Cyborgs of you." A tight grin etched a line of teeth in Glisson's face. "It's your only hope. Accepting it, you will have lost to us at last!"

Calapine glared down at him. Harvey was caught by the carping meanness in Glisson's voice. His own schism from the Underground had always known the Cyborgs were too calculating and narrow-minded to be trusted with purely human decisions, but he had never before seen the fact so clearly demonstrated.

"Is that your plan, Svengaard?" Calapine demanded.

Harvey jumped up. "No! That's not his plan!"

Svengaard nodded to himself.

Of course! A fellow human, and
a father would know.

"You pretend to know what I, a Cyborg, do not know?" Glisson asked.



Svengaard looked at Harvey with raised eyebrows.

"Embryos," Harvey said.

Svengaard nodded, looked up at Calapine. "I propose to keep you continually implanted with living embryos," he said. "Living monitors that will make you adjust to your own needs. You will regain your emotions, your ... zest for life, this excitement you prize ..."

"You propose to make of us living vats for embryos?" Calapine asked, wonder in her voice.

"The gestation process can be delayed for hundreds of years," Svengaard said. "With proper hormone adjustment, this can be applied even to men. Caesarian

delivery, of course, but it need not be painful . . . or frequent."

XXX

Calapine weighed his words, wondering why she felt no disgust at the suggestion.

Once she had felt disgust at the realization that Lizbeth Durant carried an embryo within her; but Calapine realized now her disgust had been compounded of jealousy. Not all the Optimen would accept this, she knew. Some would hope for a return to the old ways. She looked up at the globe's telltales. No one had escaped the poisoning excitement, though. They would have



to understand that everyone was going to die . . . sooner or later. Choice of time was all they had.

We didn't have immortality after all, she thought, only the illusion. We had that, though ... for eons.

"You're not going to accept this ... this foolish proposal?"

The mechanical man is outraged at a living solution, she thought. She said: "Boumour, what do you say?"

"Yes," Glisson said, "speak up, Boumour. Point out the illogicality of this . . . proposal."

Boumour turned, studied Glisson, glanced at Svengaard and the Durants, stared up at Cala-

pine. There was a look of secret wisdom in Boumour's pinched face. "I can still remember . . . how it was," he said. "I . . . think it was better . . . before I . . . was changed."

"Boumour!" Glisson said.

Hit him in his pride, Svengaard thought.

Glisson glared up at Calapine with mechanical intensity. "It's not yet determined that we'll help you!"

"Who needs you?" Svengaard asked. "You've no monopoly on your techniques. You'd save a little time and trouble, that's all. We can find embryos."

Glisson stared from one to the other. "But this isn't the way it

was computed You're not supposed to help them!"

The Cyborg fell silent, eyes glassy.

"Doctor Svengaard," Calapine said, "could you give us elite, viable embryos such as the Durant's? You saw the arginine in trusion. Nourse believes this possible."

"It's possible," Svengaard said. He considered. "Yes, it's . . . probable."

Calapine looked up at the scanners. "If we accept this offer," she said, "we go on living. You feel it? We're alive now, but we can remember a recent time when we weren't alive."

"We'll help if we must," Glisson said, and there was that carping tone in his voice.

Only Lizbeth, realizing her own bucolic docility in pregnancy, recognizing the flattening tenor of her emotions, suspected the *logical* fact which had swayed the Cyborg.

Docile people could be controlled. That's what Glisson was thinking. She could read it in him, understanding him fully for the first time now that she knew he had pride and anger.

Calapine, reading on the Survey Globe's wall the mounting pressure of a single question from her Optiman audience, set up the analogues for an answer.

It came swiftly for the scanners to see: "This process could provide eight to twelve thousand years of additional life even for the Folk."

"Even for the Folk," Calapine whispered. They'd discover this, she knew. There could be no more Security now. Even the Survey Globe had been shown to have flaws and limits. Glisson knew it. She could tell this, reading his silent withdrawal down there. Svengaard certainly would realize it. Possibly even the Durants.

She looked at Svengaard, knowing what she had to do. It would be easy to lose the Folk in this moment, lose them completely.

"If it is done," Calapine said, "it will be done for anyone who wishes it — Folk or Optiman."

This is politics, she thought. This is the way the Tuyere would do it . . . even Schruille. Especially Schruille. Clever Schruille. Dead Schruille. She could almost hear him chuckling.

"Can it be done for the Folk?"
Harvey asked.

"For anyone," she said, and she smiled at Glisson, letting him see how she'd won. "I think we can put it to a vote now."

Once more, she looked up at the scanners, wondering if she'd gauged her people correctly. Most of them would see what she'd done, of course. But there'd be some clinging to the hope they could restore complete enzymic balance. She knew better. Her body knew. But some might choose to try that dangerous course back to boredom and apathy.

"Green for acceptance of Doctor Svengaard's proposal," she said. "Gold against."

Slowly, then with cumulating speed, the circle of scanner lights changed color - green . . . green ... great washes of it with only here and there a dot or pocket of gold. It was a more overwhelming acceptance than she'd expected, and this made her edgy, suspicious. She trusted her voting instincts. Overwhelming acceptance. She consulted the globe's instruments, read the presentation of the answer: "The Cyborg can be maneuvered through its belief in the omnipotence of logic."

Calapine nodded to herself, thinking of her madness. And Life cannot be totally maneuvered against the interests of living, she thought.

she said.

And she found she did not like the sudden pouncing look on

Glisson's face. We've overlooked something, she thought. But we'll find it . . . once we're newly adjusted.

Svengaard turned to look at Harvey Durant , allowed himself a broad grin. This was like the operating room, he thought. One shaped minutia, and the broad pattern followed. It could be done with precision even as it was done down in the cell.

Harvey weighed Svengaard's grin, read the emotional betrayals on the man's face. All the faces around him carried their own exposure in this instant, all open to be read by a courier trained in the Underground. It was a standoff between the powerful.

The Folk might yet have a chance — thousands of years of chance . . . if Calapine were to be believed — and she believed it herself. The genetic environment had been shaped into a new pattern, and he could see it. This was an indefinite pattern, full of indeterminancy. Heisenberg would've liked this pattern. The movers themselves had been moved (and changed) by moving.

"When can Lizbeth and I leave here?" Harvey asked.

- FRANK HERBERT



Who is Human?

by HAYDEN HOWARD

Illustrated by GAUGHAN

West was known as the murderer of Eskimos — But now one of his victims was trying to kill him!

I

Stinging snow particles shot across the dim igloo. The three men and the woman blinked at the small bright hole which appeared in the snow wall. The muffled sound from outside must have come from a rifle.

Dr. West smiled wryly and slid off the sleeping-ledge on to the icy floor. "I believe we've finally found Peterluk."

A second spray of snow, accompanied by a distant rifle report, brought Councilor LaRue erect in the igloo. "Mon dieu, the man is berserk—or has formidable humor." He heaved his bulk toward the low exit tunnel. Head and shoulders committed, he changed his mind and buttocked against Dr. West. "No doubt this Peterluk shoots only at strangers?"

Both whitemen glanced up at their guide. The young Esk, with a smile as quizzical as an Eskimo's, was kneeling on the skincovered ledge, poking his finger into the upper bullet hole.

"Get down here," Dr. West said, and the Esk peered down at them, smiled like a Cheshire cat in the dimness of the igloo and slid down beside them, his hand groping.

The Esk grunted with pleasure, having discovered an unidentifiable glob of meat which the escaped Peterluk had discarded. The young Esk's chewing sounds were punctuated by Eevvaalik's tubercular coughing from the other sleeping platform. Even now while some people walked on the Moon, others lived like this.

In the cold stench, Eevvaalik sat trimming the seal oil lamp as intently as if her husband, Peterluk, were not shooting into the igloo.

Eevvaalik, a bullet might hit you," Dr. West said. "Come down here."

With a sliver of bone, Eevvaalik expertly pressed the smoking
end of the wide cotton-grass wick
into the oval pool of seal oil, so
that the smoke faded away and
the line of flame brightened.
Such soapstone lamps only could
be seen in use here in the Cultural Sanctuary.

Another shot smashed through

the igloo. Eevvaalik made no move to lie down with the two whitemen, Smiling, she turned her head away from the two whitemen hiding on the floor. "Bullets of this person's husband have eyes."

Councilor LaRue laughed as politely as if he were at a banquet in Montreal. "Madam, this Peterluk, I'm sure he is a wonderful shot. I want to ask you—" LaRue paused as a spitting sound, a fourth rifle bullet, passed through the snow-wall. Sharp snow particles had struck his face. He smiled.

With the natural ability of the born politician, Councilor LaRue already spoke modern-Eskimo as well as most of the Cultural Sanctuary guards. LaRue was anti-Sanctuary. Dr. West had hoped to spend several weeks if necessary showing Councilor LaRue the potential menace of the population explosion in the Sanctuary. Dr. West had hoped to convince LaRue that not all of these people were Eskimos, that few of them were Eskimos.

"Tell your husband we surrender," LaRue murmured, brushing snow from his face. "That means don't shoot any more. We—we whitemen will go away. "We will leave at once."

The flickering flame-line from the lamp reflected on her greasy face. She smiled. Her teeth were worn to stumps. Dr. West knew she was 44 years old.

"Tell him to stop shooting," LaRue's voice was repeating.

"It is not a woman's place to advise her husband." Eevvaalik bowed her head, and a fifth shot spat through the igloo.

Peterluk take?" Dr. West hopefully asked her. "Only the bullets in his rifle?"

"My husband has long eyes. When your airplane was smaller than a petrel-bird, already my husband had packed the sled. His big dogs became smaller than lemmings."

"But he made a circle and came back," Dr. West said, looking hopefully around the jumbled interior of the igloo. "Did he forget his box of bullets?"

Snow sprayed inward, and a new little eye appeared in the wall of the igloo. "Number five," muttered LaRue, his count already understandably inaccurate. "He has sufficient bullets."

Eevvaalik smiled to herself. "This person wished to travel with her husband. But he said this person too sick. He said, if Dr. West in the airplane, this person should bare arm."

"An injection for your fever the needle?"

"Eh-eh," she laughed in agreement. "The iron needle." "I will give the injection. I will make the sickness go away—if you will go outside and wave to him to stop shooting."

Eevvaalik bowed her head. she was too courteous to disagree but—

Dr. West wondered what had happened to the pilot they'd left tying down the ski-plane. No matter which way the gale was blowing, the Englishman should be able to hear the shots. Their three rifles were in the plane.

"Number six," sighed LaRue, as snow sprayed down on Dr. West's face. "Madam, please go outside and ask your husband to stop the shooting. Tell him we only wanted to question him, we only wanted to ask him where all these new people are coming from."

They glanced at the Esk.

The Esk smiled as if he realized he had become the subject of the conversation.

"My babies," Eevvaalik laughed.

LaRue politely ignored this remark. "Now if you would go outside, Madam, and tell him—oh!" This bullet ripped across the caribou skin cover on the sleeping platform past LaRue's face.

"Mon dieu! You —" Councilor LaRue's hand closed around the Esk's arm—"you go out and tell him to stop shooting."

Obediently, the Esk crawled out through the tunnel to the little entry dome where their outer parkas were hung, and they could hear him struggling into his stiff parka.

"He's much shorter than we are. Peterluk will notice this man's a fellow Eskimo," the Councilor muttered. "After all, they know each other."

Dully, they heard the ninth shot. No hole appeared in the igloo. Dr. West scrambled along the snow tunnel to the entry and blinked at the dark object on the snow-glare. He thrust his head forward, then retracted it as a bullet kicked up snow.

Whirling inside the entry dome, he seized a coiled line with a massive bone-splint tied to a stone. It was for snagging the floating body of a seal.

As Dr. West yanked the body of the Esk toward the entry, the body shuddered, and the tenth shot echoed against Dr. West's eardrums. Dr. West sank to his stomach.

The eleventh shot splattered through the entry wall, leaving a pair of holes slightly higher than his shoulders. He winced. Eleven shots meant Peterluk had more than a clip of ammunition, possibly a cardboard box of 20, probably several boxes; damn, more likely a whole wooden case of bullets!

Prone, from his low angle Dr. West noticed with swelling anger that one of the shots had torn off the top of the Esk's skull. The line falling from his hands, Dr. West scurried backward along the tunnel into the foxhole center of the igloo. "Peterluk killed him."

The Councilor sprang to his feet, grabbed Eevvaalik by the shoulder, pulled her down on to the floor. "Why? Why is your husband killing us?"

"He did not tell this person."

"Is he afraid to tell us where
the Esks came from?" Dr. West
asked. "Is that why he kept running away?"

"This person—" Eevvaalik firmly removed herself from La-Rue's grip and climbed back up on the sleeping platform as bullet number twelve spattered wet snow across the igloo. Compulsively she trimmed the seal oil lamp. "This person's husband has said he does not like so manymany people. Too many people spoil the hunting."

"But we do not come to shoot seals," Councilor LaRue protested, and he squirmed on the icy floor, suddenly directing his anger to Dr. West. "You—if I—if my Uncle had not listened to you, I would be in my warm office. My secretary would be bringing me hot coffee et croissants. Instead I am being fired

upon, frozen, murdered by savage — by voters. I do not think all the maniacs are out there. I think the maniac is you!"

H

Councilor LaRue's uncle was Etienne LaRue, grand old man of Canadian politics, whose political leadership sprang from the days when French Separatists put bombs in mail boxes. Solidified by his 84 years, Etienne LaRue's hatreds were the Conservative Party, the English language and the Eskimo Cultural Sanctuaries which prevented Quebec's exploitation of the Far North.

Old Etienne LaRue's saurian hatred of the Cultural Sanctuaries was the reason Dr. West had turned to him—after Dr. West's warning report had been ignored by the Cultural Sanctuary Commissioners.

When Dr. West had told of the frightening significance of the population increase in the Cultural Sanctuaries, the Commissioners had been more impressed by his description of the hunger, the increasing scarcity of warm clothes. To Dr. West's dismay the Commissioners voted to temporarily resume the old Family Allowances and ordered one relief plane to airdrop packages and baby clothes.

One Commissioner twisted an evasion into a boast. "While a temporary ecological imbalance may have appeared on the Boothia Peninsula, basically this shows the value of the Cultural Sanctuaries. It proves that our pioneering Far North Eskimos, freed from servile dependence on industrial civilization, not only can survive, but can increase."

"But the way they are increasing is not—human," Dr. West exclaimed. "Even the mutation explanation is insufficient." Dr. West then had made the mistake of boring busy men with detailed observations. When he attempted to hypothesize internal differences between Eskimos and Esks and to retell the Esk's own views as to their origin, he was met by raised eyebrows and growing suspicion of his sanity.

"Dr. West, your so-called evidence seems to be Eskimo myths and your—intuition."

"Yes, I admit there is insufficient medical evidence as yet. That is why we need a study team; an autopsy, dissections must be carried out at once."

"Dr. West, would you have us arrest a Boothia Eskimo so you could cheerfully vivisect him like a dog," a Commissioner laughed unpleasantly, "because you think he is not human?"

"No!" Dr. West now found himself accused of being a racist.

"Eskimos are just as human as I am," another Commissioner exclaimed in righteous anger.

"But I'm not talking about Eskimos," Dr. West had shouted. "Can't you understand, I'm talking about Esks. Esks and Eskimos are not the same."

"Anyone who breeds faster is sub-human, is that what you're saying? I move we waste no more time with this man," the Commissioner continued. "Gentlemen, a little sidelight on Dr. West's veracity—his sanity. You know of Dr. West's limp, his leg injury, his six-month's hospitalization, which he flamboyantly attributes to an attack by a Polar Bear. But our Sanctuary guard reports the Eskimos confided to him that Dr. West actually was bitten by a sled dog. I move we adjourn."

Seething with frustration, Dr. West had taken the plane to Montreal. Dr. West had hobbled into the office of Etienne LaRue, the powerful politician, so old he was now a statesman, who hated the whole Cultural Sanctuary concept and listened with open lips.

To Dr. West's surprise, the old man was even more willing to conclude that the Esks were not human than was Dr. West.

"Voila, now we get rid of them! Those wild Eskimos are no better than dogs, their morals—Dogs-in-the-manger is what they are." The old man clutched Dr. West's arm. "All that land up there locked in Eskimo Sanctuaries—"

Dr. West knew the Frenchspeaking population of Canada had been increasing rapidly.

"They are not human, those Eskimos," the old man repeated. "Look at their faces, like grinning devils, I dream of them. Slant-eyed devils! I wake myself up. They are evil spirits!"

Whether the old man was superstitious, racially prejudiced, a senile paranoid, or all three, Dr. West was willing to accept any assistance which might help stem the population explosion in the North. Theoretically, its consequences might cover the World.

The old man smiled: "My nephew will head the investigation."

Now the portly nephew of Etienne LaRue was squirming on the icy floor of the igloo.

If an dieu, that is the tenth shot," Councilor LaRue laughed unhappily. "That savage has enough ammunition to drive both the English and French from Canada! I am cold and I do not want to die. Listen, I think we should break through the opposite wall of the igloo and run for it."

"To where?" Dr. West demanded.

"To the plane. Don't be cowardly. Eskimos are all poor shots."

"The pilot has tied the plane down," Dr. West retorted. "You heard him shout the wind was too strong to take off or do anything. Listen, it's blowing a gale right now. Running all the way down there would only attract Peterluk's fire. He would shoot into the plane."

"Too much logic. We go! A brave pilot will taxi and take off into the hurricane itself if the bullets are chasing him." La-Rue paused. "Where is that fool? He said he'd come up here to the igloo."

"He's damn cold if he's still inside the plane. I hope he's still alive. I hope Peterluk hasn't already been down to the plane."

"My friend," Councilor LaRue blurted, unexpectedly flopping his arm around Dr. West's shoulders, "so do I. So do I. This igloo is as cold as a crypt. Poof. That was bullet number eleven. See, it passed completely through the snow bench. He is firing lower. I do not care; I no longer wish this Eskimo's vote," LaRue laughed nervously.

On the sleeping platform, Eevvaalik coughed and spat blood.

"Doctor, in your fanciful dis-

tinction," LaRue said, "is she an Eskimo or an Esk?"

"She is an Eskimo. Of these people, only Eevvaalik has had T.B., the only one. Esks do not appear to be subject to tuberculosis. They don't even have lice! Bacteria and parastic organisms may not have had time to adjust to differences between Eskimos and Esk metabolisms."

"Fine words and a theory of which you admit you have no proof. Did you not tell my uncle that Esks appear like swallows from the mud? Something like that. You have confused the old man-and me. I saw all of those people back in the camp where you picked up the guide, rest his soul, and they were the cleanest, the most helpful Eskimos I have seen in my many trips to the North. Certainly, they are human! Are you insane? Everyone in my family knows my uncle is insane. I wish I were in my warm office."

"I wish it were true," Dr. West muttered as bullet number 14 zipped through the igloo from a new angle.

tell me Eevvaalik is an Eskimo," LaRue said. "It was you who showed me the old cenlist, when the government still had the compassion to give the Family Allowance and let the

Far North Eskimos buy modern tools. Her fingerprints. Her chest x-rays. This Ecvvaalik and Peterluk, they were numbered children of those families who fled to the Boothia Penninsula—"

"Yes, and where are their families now?" Dr. West answered. "Nearly forty Eskimo adults and children who were on the old Family Allowance census rolls have vanished. Only these two—"LaRue looked up at Eevvaalik. He smiled winningly. "Eevvaalik, where are your father and mother, your sisters and brothers?"

"All dead. Burned."

"Burned?" LaRue turned to Dr. West. "Don't tell me she also is referring to the legend of the Burned Place we flew over."

"Yes. The blackened circle in the granite rock, the Burned Place." Dr. West laughed wryly. "If you believe the bright newly created legends, it is where the Grandfather of the Esks appeared and burned those who disobeyed him."

Shaking his head, LaRue smiled up at Eevvaalik. "I think you are much wiser than Peterluk. You understand more than your husband who runs away. I will open a little hole for you in the side of the igloo. Then you can shout to your husband, 'Do not shoot. These whitemen are friends.'"

Eevvaalik smiled back. "A good husband does not listen to his wife when there are others nearby to hear them."

"Then go out to him! Tell him to stop shooting."

"This person would obey and be shot—if she was one of her stupid children from the big camp." Eevvaalik wiped her mouth with the back of her hand. "But she is not. She is Eevvaalik!"

"And Peterluk also is different," Dr. West added questioningly, hoping somehow she could lead LaRue to realize that Eskimos are not Esks.

"Eh-eh, my husband also is braver than those meek children in the camps. Our bellies are hungrier. We do not like to be told what to do. My husband needs big room to hunt."

This boasting would convince no one there was a difference.

Dr. West persisted, "why won't Peterluk tell us if these people's night stories are true? Why won't he tell us where they come from?"

"Eh-eh," Eevvaalik laughed.
"Why do you men always want
to ask my husband? This is a
woman's question, where babies
come from."

"All these people were not born here?" Dr. West asked as another leading question.

"I am the mother!"

E ven Dr. West stared up at her in disbelief, as she laughed. "I am grandmother, the great-grandmother; I am barren now, but they began from me."

"Then the legend of the man who fell from the sky, whose back split open so that he bore a son, that is false?"

"Who can say what is false? Peterluk was only a boy-man then, and how could he recognize his Grandfather?" woman shook her head with distaste. "No, it would have been better if a bear was his Grandfather. His Grandfather! I was but a young girl who had borne only one child. Peterluk, how obediently he hunted meat to feed his Grandfather! Like dog, Peterluk dragged the sky iron from his Grandfather. Grandfather-creature was so big we were afraid to run away."

"Then his Grandfather was not a man," Dr. West persisted, finally thinking this might lead to some evidence of extra-terrestrial origin.

"My husband saw a man. If he had wanted to see a bear, the thing would have looked like a bear. What did I see? One night Peterluk loaned me to his Grandfather. I lay on the skins looking up as his Grandfather moved to-

ward me. I tried to see a man."

Then Eevvaalik laughed in derision. "No man. He took out something. It was not part of him. It was made of—glass. It looked like—like when you gave me the injection but much bigger. Oh, so bad! I was a young girl and very frightened."

"Artificial insemination!" Dr. West exclaimed.

"Disgusting," Councilor La Rue protested. "Was that fiend a scientist? What is going on up here in the North?" LaRue rose toward Eevvaalik. "I do not approve of any tampering with the human body. What evil did this man do to you?"

"Eh? I was a surprised girl when I became sick in the stomach only two days later and swelled up and had my baby in a month!"

Eevvaalik grinned and gestured crudely. "That glass tube! That one, that Grandfather, eheh, after that he kept after me. I was no more use to Peterluk, always I was heavy with babies. I was too tired to haul the sled, or gather driftwood, or chew skins. As a wife for Peterluk I was being ruined. Too many children were crying for food. In a year I bore more children than I have fingers! Peterluk was only a boy-man then and slow to anger in those days, but one night-"

She stopped as if the memory

frightened her. "It is better to believe all these people began when his Grandfather's back was split open."

Dr. West noticed where she was looking. Across the igloo at a stone axe.

"That Eskimo, he has stopped shooting," LaRue ventured. "Perhaps Peterluk is going away. West, why don't you carefully look out."

berating rifle shot from the entry. The two men leaped up on opposite sleeping platforms on either side of the tunnel entry. Dr. West grabbed the stone axe. "If he comes in, we both jump him."

Somehow the bullet had passed the length of the tunnel and across the floor where they had been crouching without striking either man.

"My husband," Eevvaalik called. "We have two visitors.
One is waiting on each side above the door hole."

Peterluk's hoarse voice entered the tunnel. "Tell the whitemen to come outside."

Dr. West shook his head at Eevvaalik.

"They are afraid you will kill them," she called, and carefully began trimming the lamp.

After a while Peterluk shouted, "Tell them to come out or

I will break a hole in the side of the igloo and shoot them where they are lying."

Neither whiteman spoke. Dr. West clutched the stone axe, hoping Peterluk would do just that—chop his way into the igloo. Then Peterluk would have to set his rifle down—or hold it with one hand and give Dr. West an instant to counter-attack.

Finally, Eevvaalik called, "My husband, you had better do it, or go away and not do it."

"Woman, close your mouth!"
Peterluk sounded as if he had
put his head into the tunnel.

The three people in the igloo sat there waiting. Dr. West imagined he could hear Peterluk's hoarse breathing.

"Children who grow big as a man in five winters are very good," Eevvaalik said finally. "But too many. Children have children so quick, too many. Never enough seals. When this person was a little girl, my mother told me it was a hungry winter and I was born, and she would have left me out on the ice but changed her mind because meat was found. Eh-eh, customs were wiser in those days, less hunger, enough new babies were left on the ice. Better not too many girls to feed. We need more hunters and less hungry babies."

Neither man commented.



Peterluk's voice called. "You better hurry. Many people coming, and they will kill you. You better come out and run away."

Neither man moved. Simple-minded liar, Dr. West thought, picturing Peterluk's wide-cheeked visage. No people.

"Those many people from the big camps wouldn't kill anybody," Eevvaalik snorted. "They want everyone to like them, but there are too many of them."

"Come out." Peterluk called, "The people are coming closer. Soon it will be too late."

Neither man moved or reacted to this painfully obvious trap.

"All these people talk about is their Grandfather Bear from the sky," Eevvaalik said, and added with outrage, "They are not Christians!"

A shot resounded outside the

GALAXY



tunnel entrance, but there was no sign the bullet passed through the igloo.

"All they talk about," Eevvaalik sneered, "is—soon so many of them that their Grandfather will come down from the sky. This person thinks he will merely eat them. That is what should be expected, if he is a bear. These people are not Christians."

There were three shots in quick succession.

"He must be firing in another direction," LaRue hissed. "Toss me the axe."

LaRue rose on his knees on the sleeping platform. With the handle of the axe he began knocking a hole in the roof of the igloo above his head, high enough up so that Peterluk would have to scramble up on the side of the igloo if he were to shoot in at them.

Two more shots were fired.

Then a fusillade of shots. Light bursting through the roof as snow chunks fell inside.

Standing up on the sleeping platform, LaRue thrust his head up through the hole in the igloo.

"Mon dieu!" like a turtle La-Rue ducked his head back inside as more shots reverberated.

"Mon dieu, hundreds of Eskimos. He is shooting them."

Again LaRue poked up his head through the hole. "They are coming to rescue us I think. Ah, so many of them coming, like lemmings. He is shooting them, but they know no fear."

Now, between the shots, Dr. West could hear them calling to each other.

"They have him! They have seized him. They have taken away his rifle." LaRue pulled down his head into the igloo. "They have rescued us I hope. There are so many of them, we might as well go outside in any case and congratulate them."

IV

out of the tunnel into the blinding snowlight, he recognized Peterluk standing among the Esks. None were holding him.

Peterluk stared at the two whitemen from the igloo, whirled and began to run.

"Stop him," Dr. West shouted.

A few Esks reached out half-heartedly. Peterluk brushed past them. They didn't try to stop him. He was escaping. He was running wildly in a direction midway between plane and ridge.

Dr. West hobbled after him, staggered, his leg cramping, and looked back for help. LaRue was standing among the Esks shaking their hands. LaRue obviously wasn't going to run after Peterluk, and Dr. West definitely did not want LaRue to shoot Peterluk, who still might explain the origin of the Esks.

Already gasping for breath, Dr. West changed his course to the direction from which the original bullets had entered the igloo. Since Peterluk's sled and dogs were not visible he thought they might be concealed behind the ridge. It was probable Peterluk had fired the first shots from up there.

Dr. West's left thigh muscles jerked like a poorly constructed android's. It was true that he had been bitten by a polar bear, not a dog, and his thigh contained a great white square of plastic surgery. As he limped through the wind, his patched muscles warmed and gained rhythm. He scrambled up the snow-covered ridge.

The dogs growled at him. Closer than the dogs was spread a worn caribou skin on which Peterluk must have lain. Fired cartridges gleamed.

Dr. West cursed, wondering if the three rifles were still in the plane. "Damn!" Everything he did seemed to draw him deeper into a trap. Undoubtedly Peterluk had shot the pilot. Now Peterluk probably had turned off, ran to the plane to get another rifle.

Peering back over the ridge, Dr. West could see the plane but no Peterluk. What did this mean? If Peterluk had sniped the pilot from a distance, if Peterluk had not entered the plane, then he might not realize the rifles were in the plane. Peterluk probably believed they had rifles. The reason Peterluk had not broken into the igloo and shot them down like mice in a nest, Peterluk probably thought whitemen would have enough sense to have their rifles with them. Now Peterluk must be running for cover, circling back toward his sled.

Dr. West ran to the sled with virtually no limp, seized the whip, beat back one snarling dog with the handle, then freed the sled. With the long whiplash, he snapped the lazier dogs to their feet and was driving the sled forward. He had the dogs in good control when Peterluk appeared along the back-side of the ridge.

Peterluk ran away from the pursuing sled until he was exhausted, falling. He lay facedown on the snow. The dogs sniffed him, as Dr. West rammed his knee on Peterluk's back and tied his hands behind his waist. There was no resistance. He tied Peterluk's feet as Peterluk lay breathing hoarsely.

"Why did you shoot at us?"
"Too many," Peterluk gasped,
"too many."

When the sled carrying Peterluk reached the igloo, Dr. West smiled prematurely at LaRue. "Listen to this. Peterluk, tell him."

"Not real people. Not real Eskimos. So it was not bad to kill them."

"It is bad!" LaRue exploded. "Killing is the worst sin. Why were you trying to kill us, the pilot, a whiteman?"

"This person dreamed the airplane held the Man-Who-WasBitten-by-a-Dog." Peterluk indicated Dr. West by pointing
with his stubby nose. "This person also dreamed guards with
him!"

"No guards. Peterluk is afraid of Cultural Sanctuary Guards because they have police functions and because—" Dr. West stared down at the bound Eskimo—"last winter on the ice he shot three Esks."

"On the ice not enough seals,"

Peterluk explained. "A few winters ago many seals but now Peterluk is starving. So many people this person can't even find one old breathing hole in the ice; there are so few seals left. Too many people."

"You murderous savage," La-Rue said. "You can't simply point your rifle like God with a thunderbolt and reduce the number of people."

"Eh-eh?" Peterluk laughed, confused. "Three young men from the big camp, on ice they killed a seal. This person's belly told him to take the seal. Eh-eh, anyway their families not miss them, there are so many. They look like us but they are not Innuit, not Eskimos."

66 Deterluk, tell what you saw fall from the sky," Dr. West insisted, but LaRue, squatting down, grabbed Peterluk by the front of his parka.

"Savage, I have done you no wrong!" LaRue shouted, "Why did you shoot at me, a whiteman?"

"Nothing from sky. Too many people." Peterluk muttered, defensively closing his eyes.

"Yes, too many people," Dr. West insisted to LaRue. "Listen, on the ridge Peterluk told me that he started to drive his sled away, to escape from the whitemen. He thought we would arrest him because he'd killed three Esks. Then he had a better idea," Dr. West said with irony, staring at the Esks all around them. "There was an Esk camp to the south, so he would shoot the whitemen, and the police would think the Esks had done it, and the police would take away the Esks."

"Too many," Peterluk repeat-

"You see," said Dr. West to LaRue. "You have seen the big camp. From the plane you have seen other camps dotting the coast. There are too many."

"Too many?" LaRue exploded. "Eight of them lying dead because they tried to save us, because they walked forward empty-handed like heroes and took away this maniac's gun! Too many? There are not enough Eskimos! There should be more Eskimos. They saved our lives. These wonderful people saved our lives."

"But something must done-"

"Are you one of those birthcontrol fiends?" LaRue said. "Who are you to decide who lives and who is not to be born? These people saved my life, and I'll tell my Uncle Etienne. These people need food. They need warm clothes. You see there aren't enough skins to go around. Look at these poor people shivering in

the snow, but they saved my life. Look at that man lying there wounded, but he's smiling. Don't tell me these Eskimos aren't human, they're the most human people of all."

"But they're not human!" Dr. West shouted, "That's the terrible part, they're not human."

"Who are you to say who is human?" LaRue roared. "These people act gooder than you. I'll fly that plane! I'll report to my uncle these people need to be freed. You call this a Cultural Sanctuary? I say it's a starvation cage!"

palm. "It's an extermination cage. If those Cultural Sanctuary Commissioners are plotting birth control, we'll put a stop to that. My uncle con-

trols a lot of votes. Mon dieu, these people have votes! My uncle will make sure these Eskimos have the opportunity to vote."

Stunned, Dr. West stared at the blinding snow. Bringing a politician to the Cultural Sanctuary had become a terrible mistake.

The crying of a new baby pierced Dr. West's conscience. Even here on the snow another Esk woman had given her monthly birth.

The world's glacier-huge population problem would become a tidal wave.

His face blank, Dr. West knew the Esks were increasing so fast they could in one life-time submerge the human population of the world. Dr. West in his utter frustration felt like crying too.

-HAYDEN HOWARD

The Thrilling New Idea That May

Mean Immortality For Everyone — Right Now!

IMMORTALITY THROUGH FREEZING

With Victor Borge, Long John Nebel, R. C. W. Ettinger, Frederik Pohl and others — complete in the AUGUST WORLDS OF TOMORROW

Plus stories and features by Sam Moskowitz and other features!

Galaxy Bookshelf

By Algis Budrys

Ten years have passed, and we are at a milestone. Delacorte Press, which incidentally is Dell's hardcover arm, has published Judith Merril's 10th Annual Edition THE YEAR'S BEST SF.

No anthology claiming to be the "best" of anything can be wholly honest in its title. There has been no serious attempt to gloss this fact for a number of years, now, but it bears my repeating it. This is Judith Merril's choice from an expanding variety of sources, as tempered by the circumstance of rights and permissions, the wishes of her editors and whatever policy judgment Delacorte has made in regard to science fiction. These are

things it would be well to keep in mind in going through the book, for the most marked feature of all in this volume is the one that has been showing up for many years but never so strongly — that is, Miss Merril's tendency to make the contents explain something about the current development of the field. (She calls it the emergence of a pattern).

There are approximately 34 items here. The ones written in such a way that one might immediately expect them to be pieces of entertainment are: "Automatic Tiger" by Kit Reed, Richard Wilson's "The Carson Effect," "The Shining Ones" by Arthur C. Clarke, "Pacifist" by

Mack Reynolds, "Sonny" by Rick Raphael, "The Pirokin Effect" by Larry Eisenberg, "The Twerlik" by Jack Sharkey, "Problem Child" by Arthur Porges, Morgan Kent's "Family Portrait,." "A Miracle Too Many" by Philip H. Smith and Alan E. Nourse, "The Last Lonely Man" by John Brunner, and Robert Rohrer's "The Man who Found Proteus."

There are varying degrees of quality - none of them stunningly high, though I am rather fond of "The Carson Effect," "The Pirokin Effect," "A Miracle Too Many," and "The Last Lonely Man." The first of these is about human behavior the day before the world is due to end; the second is an ethnic joke about signals from Mars and chopped liver, and the third is about a doctor who really can heal the sick. Only the fourth, by the way, contains what I take to be a genuine honest-to-God sciencefiction idea of novelty and merit. Brunner has thought of a new way to confer a sort of immortality, by personality-transference. He has worked out the social consequences of something which just may in fact be possible, and though he fails to do much more than the obvious once he has brought it to that point, he has nevertheless gotten it to the point of logical development, which is more than can be said, really, for most of the other stories named above. It seems to have been a year in which even the authors who work in a fairly straightforward manner were content to exercise varying degrees of charm and talent in dressing up the first two-thirds of their stories — or what would have been considered only the first two-thirds of their stories a few years ago.

The book also includes such pieces as "The New Encyclopaedist" by Stephen Becker, "Gas Mask" by James D. Houston "A Sinister Metamorphosis" by Russell Baker, "Descending" by Thomas M. Disch, "Be of Good Cheer" by Fritz Leiber, James T. Farrell's "A Benefactor of Humanity," "Synchromocracy" by Hap Cawood, and a poem called "The Search" by Bruce Simonds, all of which are not so much stories at all as they are tracts, usually illustrations of the wellknown fact that the machines are taking over and that many people have failed to fit themselves for living with anything more complicated than a strikeanywhere match. Although some, such as "Be of Good Cheer," are written ingratiatingly, and others such as "Synchromocracy" and "The New Encyclopaedist" are extremely good fun, not one is anywhere near as much a source

of entertainment and pleasure as it is an assertion of the author's view of the world, whether you like it or not. This is the group of stories among which Bob Dylan would find the ones he liked, if he had time.

More or less, finally, we have some stories which, whether I like them or not, hit me hard as sheer pieces of systematic and powerful imagination. These are "The Legend of Joe Lee" by John D. MacDonald, "The Last Secret Weapon of the Third Reich" by Josef Nesvadba, "Decadence" by Romain Gary, "It Could be You" by Frank Roberts, Roger Zelazny's "A Rose For Ecclesiastes," "The Terminal Beach" by J. G. Ballard, "The Wonderful Dog Suit" by Donald Hall, "The Mathenauts" by Norman Kagan, "The Red Egg" by Jose Maria Gironella, "The Power of Positive Thinking" by M. E. White, Robert Wallace's "A Living Doll," "Training Talk" by David R. Bunch, and finally "Yachid and Yechida" by Isaac Bashevis Singer. I don't know whether all of these are stories or not, but they are written by people who seem qualified to say whatever it is that they have chosen to say.

John D. MacDonald can write his way out of any paper bag you care to construct, and his story of the two kids in their

hotrod is in some ways the story of one kind of kid anywhere, and if set in lyrics - well, as a matter of fact, MacDonald does provide lyrics for the Top 40 transcription. "Decadence" is transformed from a routine story about a gangster who gets culture by the fact that Gary is one of the few people — like the late Richard McKenna — who has lived a good chunk of hardedged life before uttering judgment upon it; and while "A Rose For Ecclesiastes" is marvelously good only by the standards of people who think that words have an immediate and dramatic effect on society, this story of a genius human-poet communicating with the dying Martian race is daring, often moving, and betrays an acquaintance with the genuine strength of language, not as distinguished from but as congruent with its beauty.

"The Terminal Beach" is another of J. G. Ballard's evocations of desolation and the organic power of environment over both his protaganist and his reader. I will think a good deal more of Ballard after he has written just one complete story, with a beginning, middle and end—just to prove he can do it, you understand, before he goes back to wooing himself—but one cannot ignore a writer who can make you feel heat and

thirst, and then make you dismiss them as trifling compared to the real problem (whatever that may be). "The Wonderful Dog Suit" and "The Power of Positive Thinking" as well as "A Living Doll," are pretty slight stuff, but they are short, and each of them makes its small point only once or twice before it stops, in which format these points are seen to be briefly interesting. "Training Talk" brings forth two children and a father straight out of Theodore Sturgeon, which is very good, though one wishes Sturgeon had also been studied before Bunch chose his ending.

"The Mathenauts" may or may not be comprehensible. The glossary provided for us by Miss Merril and Delacorte is rather badly scrambled, but I suspect that if one knew the mathematical terminology and the abstract concepts involved somewhat more thoroughly than one does know them, this would be both a funny and a science-fictional story. "The Last Secret Weapon of the Third Reich" is a very good piece of moralistic science fantasy in the tradition of Carel Capek, and "Yachid and Yechida" is the kind of scholarly proposition put forward as either an intellectual tool or toy by scholars of the Torah. Of all the stories in this book it is the one that I felt actually had something uncommon to say, despite the fact that so many others in these pages clamor vigorously that they too, or if not they, then their authors, are important.

A great many of the stories in this Tenth Annual Anthology are in the mode of the literary magazine, bursting with insights of the vigor possible only to those who have had time to think intensely and talk much among themselves, and with any luck will establish such reputations that they will never have to deal with the world at all. Miss Merril's interdictory notes between selections assume such things as that the RNA hypothesis of transmitted learning is proven, that it's a shame what they're doing to krebiozen and that the general run of writer could be a scientist or a real philosopher if he spent but five minutes a day increasing his wordpower.

Most of all, however, as noted and implied, Miss Merril seems to think that the long-awaited merger of science fiction into the "mainstream" is being signalled by the appearance of so much compilable material in the "literary" magazines, as if fantasy and allegory had just now entered that mode. And the touchstone of quality — the criterion for the "best" when she now discovers an example in one of the more prosaic sources from which she

drew her first collections — now seems to be the degree to which the candidate work resembles this umbilicentric standard.

Though we have a milestone here, I think it marks a place more on Miss Merril's road, and less on science fiction's.

You would have thought there was no conceivable new switch on the "Universe" story. The slower-than-light interstellar spaceship, pursuing its way through the weary centuries, its crew losing touch with all reality save the interior of their vessel ... Well, you know the story, and its unhappy downhill round, its exciting struggles between the barbarian tribes which develop in its disparate compartments, and then, if the writer is so minded, the ultimate flash of hope as the good guys win out and prepare to meet their future on some noble, if erroneous basis.

Many hands have worked at improving Heinlein's impeccable statement of this theme. Not one of them till now has gotten anywhere farther. But The Watch Below by James White (Ballantine) does it. It does it by introducing another vessel into the story; and, as the story switches back and forth between the alien starship and the closed, mobile environment of the Terrestials who are equally embarked on an

immense, imponderable journey, White uses the differences and the similarities between the two to tell a moving, genuinely optimistic story.

Perhaps you have been wondering what is meant by the term "storyteller" when it appears in this column. All right — a storyteller is someone with the gift of involving his audience closely in an adventure with a beginning, clear-cut ending middle and which logically and satisfactorily fulfills the promise of the preceding parts. To be a storyteller, a writer must be able to not only pose a real-sounding problem involving people or things worth saving, he must also be able to either solve it or show that there is no solution for very good reasons.

By the rules played in these pages, neatness counts. writer is not allowed to bring in moral judgments, what "everyone knows" about the condition of the world or dogma of any sort. His characters may of course believe in these things, or they would not seem like people; but no individual who sets out to create a pocket universe is allowed the luxury of evading his responsibilities behind a bunch of mere words, no matter how skillfully spoken or how comforting their message. He is very definitely, as you can see, allowed to

solve problems, and it is by this trait that he is most readily distinguishable from some of his cousins in the Word game.

White has been very neat in this book. His aliens are actually part of a fleet of people and livestock fleeing from the destruction of their solar system. Passengers and livestock may sleep in suspended animation until a suitable new world is found for this water-dwelling race, but the crew of the guide spaceship cannot. They discover to their horror very early in their journey that repeated suspensions and revivals produce mindlessness, and so they have no choice but to mate, beget and educate children and try to keep their purpose alive. The solar system toward which they are driving is, of course, ours.

Meanwhile, on Earth during World War II, a tanker is torpedoed and technically sunk. But because of its buoyant compartments, it sinks only a certain distance below the surface and then hangs precariously suspended, drifting about the oceans of the world, written off and forgotten. There are people trapped inside, and as the situation gradually comes home to them, they have no choice but to find ways of creating light, food, air and buoyancy, and to try to stay alive until they are rescued or some other unlikely event frees them.

White gives them considerably less to work with that Defoe ever Robinson Crusoe. tanker was running empty and is therefore buoyant (White justifies this). The tanker does contain some snacks of beans, welding equipment together with oxygen and acetylene tanks, and very few other odds and ends. In otherwords, he has posed a problem just this side of impossibility, and the solution worked out by the trapped handful of people therefore seems both legitimate and properly arduous. Like the aliens, the Terrestrials must breed and educate their children if anything worthwhile of them is to survive and return once more to the main line of its destiny. Like the aliens, the Terrestrials have their dissidents, their impractical dreamers, their engineers both conservative and radical who are charged with maintaining their environment and attempting to modify it favorably; and in the end both aliens and terrestrials survive and take up the other end of the thread that broke many years earlier.

But they cannot do it except with each other's help. The aliens, landing in the oceans of Earth, create a great furor in the world. Only because they

rescue the descendants of the original tanker-trapped Terrestrials are they able to find anyone who will understand their problem and interpret it to the rest of the world. You can say to yourself all you like that nothing good and decent ever happens in the world, and that we are all going to hell. But you cannot read this book and find any place where White has lied to you in demonstrating that this is not necessarily true. You will note that he does not say that it is easy.

And, just incidentally, this is very nice writing when considered simply as prose and as an attempt to involve the reader's emotions. I had not up to now thought of White as a writer whose work was worth watching for, but we all live and learn.

Dian of the Lost Land, by Edison Marshall has long been thought of as a minor classic in the field. This short, over-condensed novel of a lost Cro-Magnon race in Antarctica has now been issued by Chilton, and some of you may be wondering if it is worth buying. I quote to you a paragraph from page 112:

"(The Neanderthal) belonged to one of the lowest races of human kind. Although his intelligence was far greater than the highest apes, he was still far below such brutish people as the African bushman and the New Zealand Maori. As yet he had never felt the slightest urge toward beauty — he understood it not at all — consequently it had never been bred into his face. The process of sexual selection which, had he desired, would have refined his features and given him at least the smooth comeliness of an African savage . . ."

From there on, you must guide yourself.

Allen Kim Lang is one of the writers who has contributed a great many good stories to the field without anyone's taking particular notice of him. He has been working at it for a long time, but he has never piled up the frequency of appearance which builds fan clubs. The other thing it helps to do is to get a few books published, and this is now being done. Wild and Outside (Chilton) is his first.

Perhaps because he has been writing for such a long time (the jacket copy credits him with "some two hundred short stories") it reads more like the thirtieth minor effort of the man who long ago stopped feeling the need to prove that he was good. Flashes of the old compulsion to do more than required can still be seen in the work, but the in-

vention is flagging and the plot is a combination of known sure-fire elements put together by rule of thumb rather than by visceral instinct. The great days are behind the author, and he reports to his typewriter as to a time-clock rather than an assignation. But, you say, this is a first novel. You are quibbling, say I, but you do give me hope.

Wild and Outside is a story about undercover baseball playing on an alien planet in order to bring about a technological revolution through the use of atomic power and sex. The hero is Eddie Keenan, otherwise, when surgically disguised, known as Iddikinnin, the warrior Iron Wrists of the barbaric planet Melon. He is sent by Earth's Maieutic Service to undermine the despotism of the Mysteriarch Mirandagor and bring technology and succor to Prince Ida of the East. Keenan, late of the world champion Mets, learns to fight with a stick, cope with the proto-feudal society in which he finds himself, and, journeying through such perils as the dread Limbo Marsh fighting off the terrible Pipers, he and his team of Rinkydinks accomplish their purpose aided by My Lady-Eyes-of-Dawn and a variety of other people including Old Mule, the Wasp, et cetera. The mood switches from hilarity nearly to tragedy and

back again with a fine recollection of L. Sprague DeCamp's Viagens series, including a nubile Brazilian engineer, and the book is good but minor and fleeting fun. Not minor league. You can tell there is an old pro at work here — an old pro much too experienced to feel that a first novel ought to be more ambitious.

Maybe he doesn't care whether anyone recognizes Allen Kim Lang's name from one story to the next, as long as the stories remain enjoyable. What a truly alien thought!

All right, Chilton, now the next step is to put together a short story collection by this man. You can call it Wild Modesty.

Daniel Keyes' Flowers For Algernon — which won a Hugo as a novelette, was a noteworthy television play and is now being made into a motion picture — is being brought out as a novel by Harcourt, Brace & World, Inc. It is very good.

Keyes, a veteran of the New York public school teaching rat race and presently an English instructor at Wayne State University, former assistant editor of Marvel Science Fiction, peers out from his jacket photograph as if he expected you to make some absolutely flabbergasting proposition to him. The wary look is occasioned by his knowing ahead

whatever your intentions he will not be able to keep from doing his best for you at whatever cost. A gentle and observant man, Keyes has done much with the story of Charlie Gordon, the retarded adult who is brought to and beyond full intellectual maturity by an experimental operation before lapsing back into the stuporous but gentle world whence he came.

On principle, I don't believe a novelette can be made into a novel. But this exception is instructive, because Charlie's essentially simple story can be used to hold up a mirror to a great many features of society and of human nature without becoming attenuated. This probably means that it is a real story, a genuine piece of life freed from the stone, various, beautiful and not new but even rarer, honest.

Meanwhile, Keyes shows us the social worker, the experimental psychologist and the ordinary people concerned with Charlie and with Algernon, the mouse whose apparent favorable response to the same sort of experimental procedure led to the experiment on Charlie. These are all shown as rounded figures. There is no one in this story who does not display both "good" and "bad" exactly as people do in getting from one end of this

world to the other. Charlie's real problem does not become immediately apparent, nor is his universe made smaller than the whole world, nor does he solve his problem. But neither is it better that he failed. He wins, and he loses. The world wins and loses with him.

In order to be this kind of storyteller - one who at least by implication takes the whole world for the universe he proposes to create - you have got to know your field inside out, you have got to know a great deal about people and about the particular human situation you propose to describe, and you have got to have a great deal of functional faith in yourself. These are the qualities which normally contribute to the making of a writer all of us know is great. The only quality Keyes has not demonstrated is an ability to repeat this sort of performance and again, with more successes and stirring failures than dull disappointments. Keyes hasn't published very much at all - he has published remarkably little fiction, and there are no indications that he is going to publish very much in the future. If this is a beginning, then what a beginning it is, and if it is the high point in a very short career, then what a career.

- ALGIS BUDRYS

Could you write for television?

By Max Shulman

rankly, I don't know. But this I do know: when I was running the Dobie Gillis show, I often paid \$2,500 and more for scripts turned out by people who should have been arrested for impersonating writers.

How such people got to be high-priced TV writers is not as mysterious as it seems. Television is an insatiable maw into which scripts must be fed at a rate unprecedented in the history of entertainment. It is a grateful producer indeed who consistently gets scripts which have been written with real understanding of television's powers and limitations.

To help train new TV writers, I joined with Rod Serling (creator of The Twilight Zone, winner of five Emmy Awards) and ten other leading authors* to start the Famous Writers School. We pooled everything we had learned in our long years in the business to devise four professional writing courses that men and women, seriously interested in writing, could take in their own homes in their free time.

How to write "with a lens"

All four of our courses give you a solid foundation in basic writing skills. And three of them (Fiction, Non-Fiction and Advertising) give you training in the techniques of television. You learn to build interesting, believable characters; how to write dialogue that rings true; how to plot convincingly. Their you develop the specialized approach that IV demands: the facility to tell your

*Bennett Cerf, Bruce Catton, Faith Baldwin, Bergen Evans, Mignon G. Eberhart, John Caples, J. D. Hateliff, Mark Wiseman, Rudolf Flesch, Red Smith



story (or documentary or commercial) in quick, visual sequences...the knack of thinking and writing with a lens!

Through a series of carefully planned assignments, you learn as you write—guided by our own specially organized textbooks. Your assignments are painstakingly edited and revised by our staff of instructors, themselves all professional writers. Under our supervision, an instructor works with you by mail, much as a producer or editor works with an established writer.

Do you have an aptitude for writing?

To help you (and us) decide whether you've got the stuff to be a writer, we have worked up a revealing aptitude test. The coupon below will bring you a copy, along with a 48-page School brochure. If your test indicates aptitude, you are eligible to enroll in the School. You are, however, under no obligation to do so.

Dept. 68: I am inter aptitude f obligation	S Writers School 3, Westport, Connecticut ested in finding out whether I have an or writing. Please mail me, without a copy of your writing aptitude test mation about the course, you offer.
Mr.	
Miss	(please print) Age
Street	
City	Zone
County	State
	ed by Accrediting Commission of the

THESE AMAZING AIDS HELP YOU HYPNOTIZE IN ONLY MINUTES! GUARANTEED FOR HYPNOTIZING SELF-OTHERS

You've seen it in the Movies

on TV — NOW
YOU CAN
OWN this
Famous
BIG 12" HIGH
ELECTRONIC

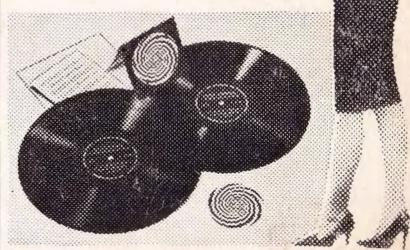
Plug in and flip on the switch. The disc revolves at just the right speed — transfixes your subject(s). Their attention is riveted to the powerful hypnotic pattern. Your every word is now more meaningful — more effective for this professional machine greatly adds to your prestige, creates hypnotic expectancy, increases your success. A marvelous aid for hypnotizing others and for self-hypnosis. Has 10" hypnotic disc, switch, handle, instructions and a high quality, silent, trouble-free motor—110 A.C.

No. SSF — \$14.95 ppd.

STARTLING SECRETS TEACH YOU DISGUISED HYPNOSIS

Revealingly tells guarded secret techniques to cause the "Indirect Trance". Subjects are hypnotized without their knowledge. Learn amazing shortcuts, make hypnosis fast and easy. Discover the safe, fast "nerve pressure" technique... the "falling back" test, others. Read — for the first time anywhere, how the author hypnotizes a roomful of people without their knowledge — using a common cooking ingredient. So simple, dramatic and effective, it is we that the low price of the book alone. Order now and get the clever "Hypnotic Trance-Fer Chart" absolutely FREE. Helps cause the "Indirect Trance."

ORDER NUMBER DH - \$1.98 ppd.



HYPNOTISM RECORD

FASCINATING ECHO-CHAMBER BACKGROUND

Listen as the Hypnotist dramatically weaves irresistable suggestions around the unique beat of an electronic metronome coming from an echo-chamber. Side one helps hypnotize others — in groups or individually. Ends "the next voice you hear will take complete control of your hypnotic sleep _ _ , ", then you take over. Side two helps in self-hypnosis, ends by giving you a suggestion for rehypnotizing yourself, then awakens you. Use the record on others — study it to develop your own technique. An ideal aid for professionals and serious students. Unbreakable vinyl, 78 rpm Extended Play — "Kit" is complete with

FREE Eye-Fixation discs and instructions.

ORDER NUMBER REC --- \$4.95

Satisfaction Guaranteed or Money Back!

MAIL NO RISK COUPON TODAY!

ALLIED AIDS, Dept. FX-25
95 Madison Ave., New York, 16 NY

95 Madison Ave., New York, 16 NY
Send the following on an Unconditional 10 Day Money Back Guarantee. I enclose \$, you pay the postage.
☐SSF -\$14.95 ☐ DH -\$1.98 ☐ Rec - \$4.95
Chart sent with orders for \$6.00 or more.
Name
Address
CityState